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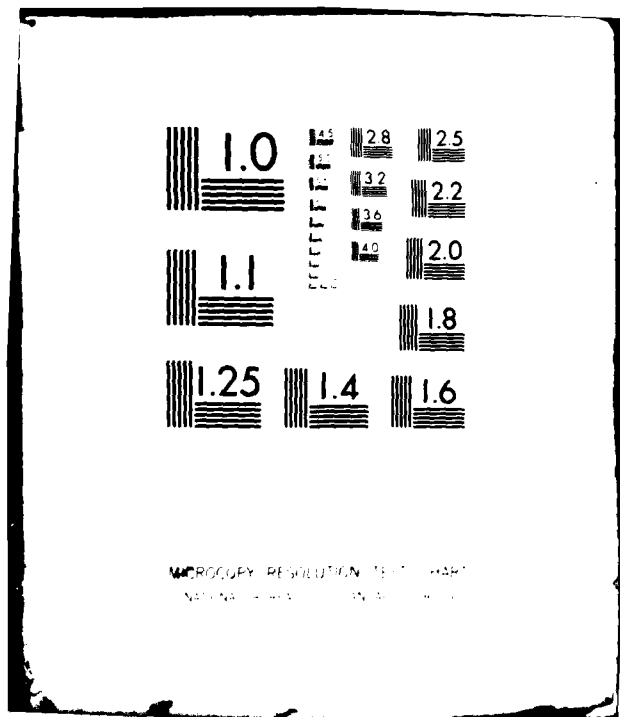
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MARINE BOUNDARY LAYER SAMPLING, FLIGHT NUMBER 2.(U)
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Marine Boundary Layer Sampling Flight No. 2

IAN D. COHEN, Capt, USAF

11 October 1979

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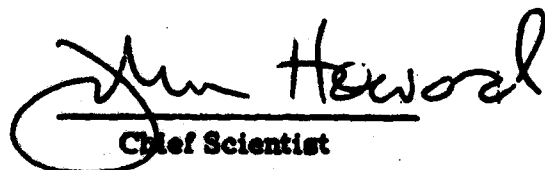
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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) ORIGINAL CONTAINS COLOR PLATES: ALL DDD REPRODUCTIONS ARE IN BLACK AND WHITE Boundary layer Particle distribution Air-sea interaction Haze Sea spray On 22 March 1979, an instrumented MC-130E for cloud physics measure- ments by AFGL made a series of 8-min sampling passes at altitudes ranging from 100 to 1000 ft above the ocean surface off the coast of Washington. The flight profile was similar to that flown by the same aircraft on 10 July 1978 off the coast of California (AFGL-TR-79-0013). Winds were light, and the visibility generally was 7 miles or greater. Varying numbers of particles were detected in the 2 to 22 micrometer range at all levels. The number of particles was fairly constant with altitude; liquid water content (LWC) was about			

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10^{-3} g/m³ at all levels. This was in contrast to the 10 July 1978 flight, where LWC varied much more, both with height and location. The differences between the two flights are attributed to the lower windspeeds and the resultant fewer whitecaps observed on this second flight.

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Preface

This report is the result of much hard work by many contributors. The aircrew, especially Major Robert Patterson, Captains Willie Cole and Pat Collins, and the maintenance crew headed by Mr. Bill Ellis, all of the 4950th Test Wing, did an outstanding job in flying and maintaining the aircraft so that the proper data could be gathered. Joining me on the project crew were Mr. Donald McLeod, MSgt James Bush, SSgt Dennis LaGross, SrA R. Lou Ames, SrA Grant Matsuoka, and A1C Wayne Domeier, all of AFGL/LYC. I wish to thank Lt Colonel Donald Varley for his help in preparing this report. Dr. Arnold Barnes, Jr. also provided much assistance. Mrs. Pat Sheehy and Ms. Barbara Main are commended for their help preparing the manuscript. Michael Francis and James Lally of Digital Programming Services, Inc. prepared the computer printouts of the data.

A

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Marine Boundary Layer Sampling Flight No.2

1. INTRODUCTION

The AFGL-instrumented MC-130E aircraft flew off the Washington coast on 22 March 1979 to obtain particulate data in the cloud-free boundary layer. The aircraft is maintained and flown by personnel of the 4950th Test Wing at Wright-Patterson AFB, Ohio. The flight was made under the auspices of the Air Force Weapons Laboratory at Kirtland AFB, New Mexico, to acquire data for its Advanced Radiation Technology program.

The flight profile is similar to a previous AFGL sampling flight made on 10 July 1978 off the California coast. Varley¹ has described data from this first flight: Relatively dense populations of 2- to 30 μ m particles at 100, 200, and 400 ft MSL were found; at the 300-ft level, there were considerably fewer particles, a finding not fully explained; and at higher levels (500 to 1000 ft MSL) there were fewer particles, as substantiated from earlier measurements of Woodcock² and Hobbs.³ Certain other results of the 10 July flight will be outlined and compared in the following pages.

(Received for publication 10 October 1979)

1. Varley, D. J. (1979) A Marine Boundary Layer Sampling Flight in Clear Air, ERP No. 652, AFGL-TR-79-0013, AD A069723.
2. Woodcock, A. H. (1953) Salt nuclei in marine air as a function of altitude and wind force, Jour. of Meteorol. 10:362-371.
3. Hobbs, P. V. (1971) Simultaneous airborne measurements of cloud condensation nuclei and sodium containing particles over the ocean, Quart. Jour. Royal Meteorol. Soc. 97:263-271.

Much of the cloud physics instrumentation on the C-130 was described by Varley.⁴ Ordinarily three Particle Measuring Systems' 1-D spectrometer probes are used. On the flight described herein, the precipitation probe had been removed to enable test data to be acquired by a new Forward Scattering Spectrometer Probe (FSSP). The other spectrometer probes utilized were the Axial Scattering Spectrometer Probe (ASSP) and the cloud probe. The last two record particles in the 2 to 30- μ m and 23- to 300- μ m range, respectively. The FSSP provides data over approximately the same particle size range as the ASSP; however, in this report only ASSP and cloud probe data have been used.

The ASSP was the main source of particulate data; it measured the light scattered by particles, calculating their size and number. The ASSP served the same function on the 10 July flight. Ryder⁵ explains that the droplet mass determined by this instrument may not be precise; however, the relative values calculated from its measurements are believed to be useful. Further information on the FSSP is given by Particle Measuring Systems, Inc.⁶ and Knollenberg.⁷

2. SYNOPTIC SITUATION

A strong upper air ridge moved into the Eastern Pacific area on 19 March. This feature, which was responsible for a week of nearly cloud-free weather for the Pacific Northwest, is shown in Figure 1, the 500-mb pattern at 00Z on 23 March. On 22 March, a surface high pressure system off the Washington coast provided clear conditions with little wind in the area of the flight. By 00Z, the high was ridged eastward into central Washington, as shown in Figure 2.

4. Varley, D. J. (1978) Cirrus Particle Distribution Study, Part 1, Air Force Surveys in Geophysics, No. 394, AFGL-TR-78-0192, AD A061485.
5. Ryder, P. (1976) The measurement of cloud droplet spectra, Preprints of International Conference on Cloud Physics, American Meteorological Society, 26-30 July 1976, Boulder, Colorado, pp 576-580.
6. Particle Measuring Systems, Inc. (1976) Forward Scattering Spectrometer Probe PMS Model FSSP-10, Operating Manual, PMS, Inc., Boulder, Colorado.
7. Knollenberg, R. G. (1976) Three new instruments for Cloud Physics Measurements: The 2-D Spectrometer, the Forward Scattering Spectrometer Probe, and the Active Scattering Aerosol Spectrometer, Preprints of International Conference on Cloud Physics, American Meteorological Society, 26-30 July 1976, Boulder, Colorado, pp 554-561.

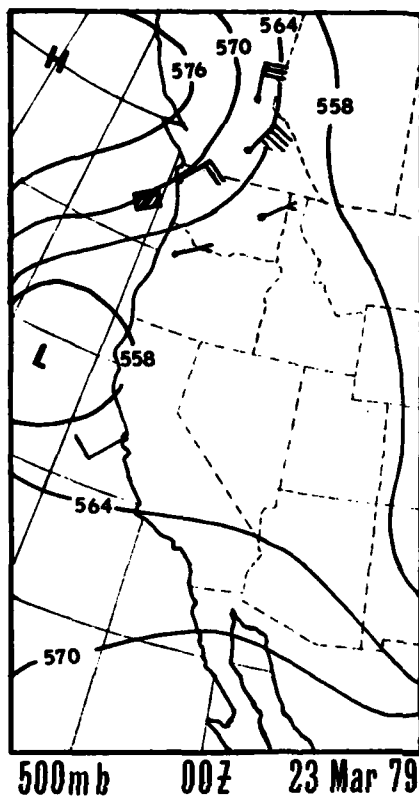


Figure 1. 500-mb Chart 00Z,
23 March 1979

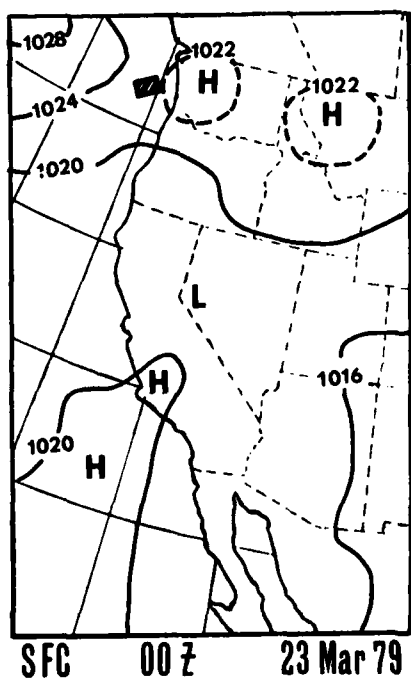


Figure 2. Surface Chart 00Z,
23 March 1979

Figure 3 shows the 23/00Z radiosonde data for Quillayute on the Washington coast. The dry nature of the atmosphere from the surface to 18,000 ft (5.5 km) is evident. Hoquiam, also on the Washington coast, reported a thin scattered cloud layer at 18,000 feet. However, most other coastal stations reported clear conditions at the time of the sampling flight. Figure 4, a western GOES satellite picture taken at 2215Z, during the first data pass, shows the generally cloud-free area over Washington and the off-shore waters. Conditions remained clear throughout the afternoon, providing excellent weather over the sampling area, shown in Figure 5.

The surface high pressure ridge provided stability in the lowest 1000 ft of the atmosphere. There was no turbulence encountered during the overwater portion of the flight. Haze occasionally reduced the visibility to less than seven miles, but the prevailing visibility usually was unrestricted. A bank of shallow sea fog with tops near 100 ft was located east of the sampling area; however, the aircraft did not fly through it. Figures 6 and 7 show the fog at the aircraft's closest approach. As can be seen, the edge of the fog bank was distinct, and the visibility outside the bank was excellent.

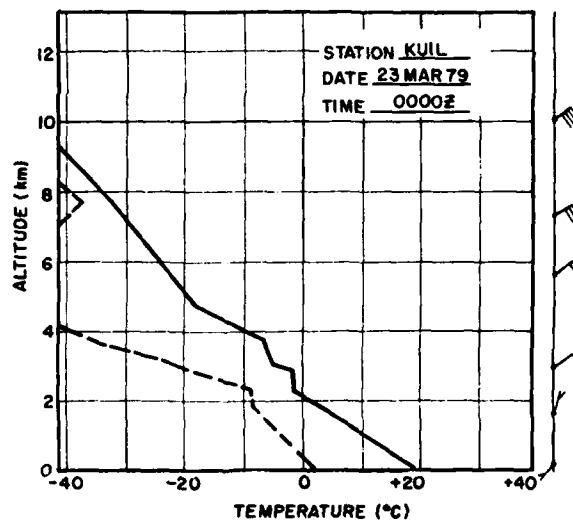


Figure 3. Radiosonde Sounding at Quillayute, WA 00Z, 23 March 1979

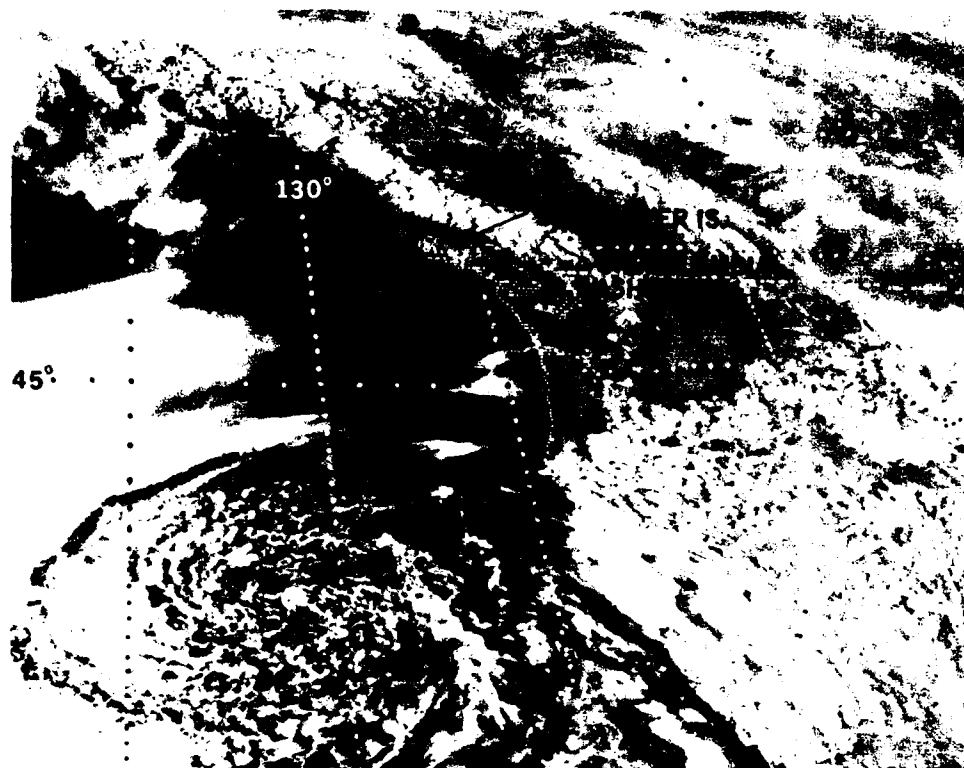


Figure 4. Western GOES Satellite Photograph, 2215Z, 22 March 1979

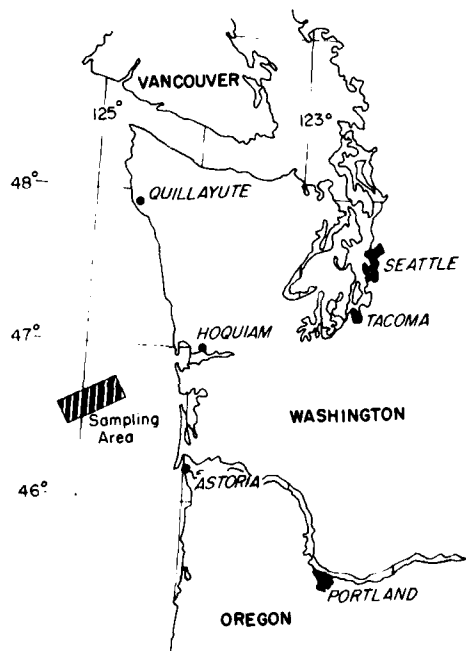


Figure 5. Location of Sampling Area



Figure 6. Sampling Area from 500 ft:
Pass 5

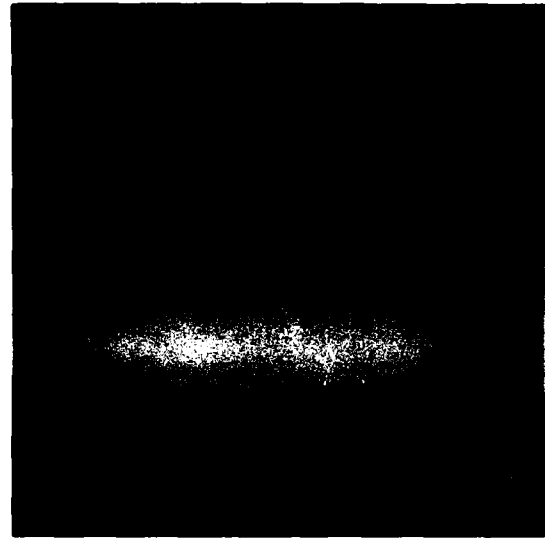


Figure 7. Sampling Area from 750 ft:
Pass 7



Figure 8. Sampling Area from 100 ft:
Pass 1

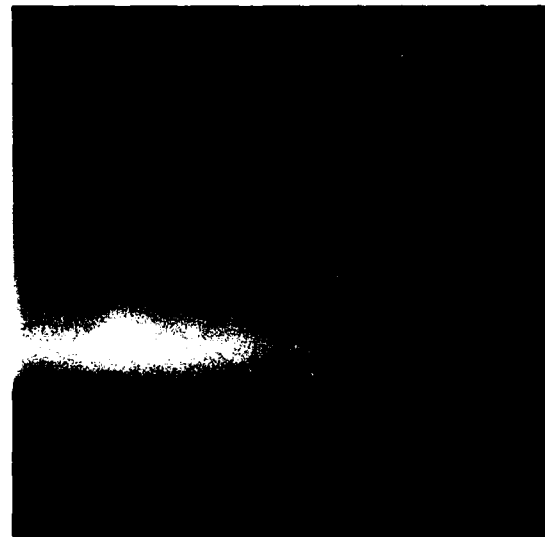


Figure 9. Sampling Area from 100 ft:
Pass 6

3. THE FLIGHT

The flight profile was as much like the 10 July 1978 flight as possible; this facilitated comparison of data from corresponding levels. The aircraft departed McChord AFB, Washington at 2124Z and flew to the Hoquiam VORTAC station. It then descended to an altitude of 100 ft over the water. All sampling passes were flown back and forth along the 210 degree compass radial from Hoquiam. A practice run was flown at 100 ft from a point 35 nm to one 55 nm from Hoquiam. All subsequent legs were flown between these same points, with legs 1, 3, 5, and 7 being inbound, and legs 2, 4, 6, and 8 being flown outbound to the southwest. The altitudes sampled were in the same sequence as those of the 1978 flight; that is, 100, 200, 300, 400, 500, 100, 750, and 1000 feet.

Each straight-line pass was 20 nm long and lasted approximately 8 min while the pilots maintained the desired altitude using the aircraft's radar altimeter. All passes were flown in clear air, away from the sea fog noted earlier.

After acquiring data (see Section 4), the aircraft flew toward Astoria, Oregon, to obtain data for another program. It then returned to McChord AFB, landing there at 0104Z, 23 March (1704 PST, 22 March). A summary of the altitude and time of particular passes, as well as certain other data acquired during the flight, is given in Table 1.

Table 1. Sampling Pass Data for 22 March 1979 Flight

Pass Number	Altitude (feet)	Begin (Z) Time	Heading	Aircraft Temperature	Aircraft Wind at 35 DME*	(degree/kt) at 55 DME*
1	100	22:15:00	030	10.9 °C	280/05	L/V [†]
2	200	22:31:00	210	11.4	011/07	L/V
3	300	22:45:30	030	12.8	012/08	L/V
4	400	22:58:00	210	13.0	039/13	100/05
5	500	23:10:00	030	12.6	056/07	170/06
6	100	23:25:30	210	11.3	024/11	045/04
7	750	23:39:00	030	14.0	058/06	094/08
8	1000	23:52:00	210	14.2	052/09	055/12

* Distance mean equivalent distance from Hoquiam.

[†] L/V windspeed was light (less than 5 knots); wind direction was variable.

4. COMPARISON OF THE TWO FLIGHTS

The flights of 10 July 1978 and 22 March 1979 were similar in that both were low-level overwater flights. The two flights consisted of 8 data legs following the same sequence of altitudes. On both days the weather was clear, although there was some haze near the surface.

The greatest meteorological difference between the two flights was the surface windspeed: Surface observations along the Washington coast on 22 March indicated windspeeds of less than 10 knots; the corresponding windspeeds on the California coast on 10 July 1978 were 15 to 20 knots. Winds measured by the aircraft at the various sampling levels also averaged 5 to 10 knots less on 22 March. Figures 8 and 9 show the surface of the ocean in the sampling area from an altitude of 100 ft on 22 March. Unlike the 10 July case, there were almost no whitecaps. The lack of whitecaps is also evident in Figure 6 and Figure 7.

The temperature profiles of the two flights are compared in Figure 10. On 10 July strong mixing resulted in nearly isothermal conditions in the lowest 1000 ft, although there was a minor inversion at 400 feet. On 22 March the temperature in the first 1000 ft increased with height, cooling only on the ascent from 400 to 500 feet. Evidently the cooler sea surface affected the temperature in the lowest 500 feet. During the flight, the aircraft reported temperatures of 11.0° to 11.6°C at altitudes of 100 to 500 ft, while Hoquiam reported a surface temperature of 15°C at 23 March 00Z (22 March 1600 PST).

This temperature contrast over land and sea was also recorded by the AFGL McIDAS (Man-Computer Interactive Data Access System) satellite receiver, which measured an infrared temperature of 10°C in the sampling area, while giving temperatures of 13° to 15°C for land areas along the coast. The cool stable layer near the surface and the light winds contributed to the more uniform distribution of particles observed in the lower levels on 22 March. Latham⁸ noted that mixing increases the number of small particles in the boundary layer. In this study, the stable meteorological situation was not conducive to the generation of small particles.

8. Latham, J. (1979) Visibility Within and Electromagnetic Transmission Through Natural Clouds and Fogs, Second Interim Report to AFOSR on Grant AFOSR-78-3511.

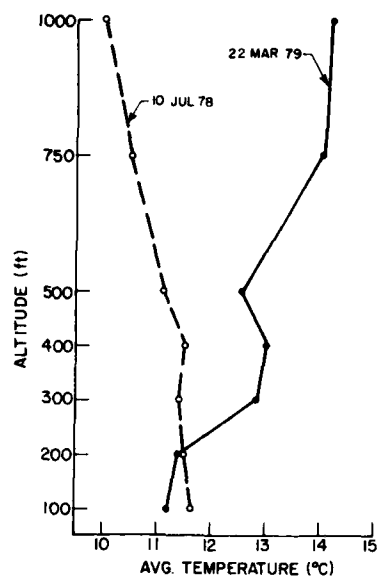


Figure 10. Average Temperature vs Height for 22 March 1979 and 12 June 1978

Figure 11 shows the contrast in vertical distribution of averaged liquid water content (LWC) with height. The greater LWC at 100, 200, and 400 ft on the earlier flight is evident in both cases. The value reported on Pass 1 is used as representative of the LWC at 100 feet. The values reported on Pass 6 are indicated by an x for the 22 March 1979 flight and a + for the 10 July 1978 flight. The finding of greater numbers of particles and a higher LWC associated with higher low-level winds agrees with Woodcock² who noted that an increase in windspeed results in an increase of salt particles in the lowest kilometer of the atmosphere over the ocean. He attributed this to bursting of bubbles in whitecaps. Similarly, Podzimek⁹ observed an intense generation of small particles over whitecaps. Podzimek¹⁰ and Monahan¹¹ also indicated that increases of surface windspeed will increase the amount of sea spray. The variation of particle count and LWC from these flights seems to indicate that the wind can affect the particle content of the marine boundary layer.

9. Podzimek, J. (1978) Concentration fluctuation of marine aerosol in the planetary boundary layer, Preprints of Conference on Cloud Physics and Atmospheric Electricity, American Meteorological Society, 31 July - 4 August 1979, Issaquah, Washington, pp 20-24.
10. Podzimek, J. (1976) Literature Survey of Marine Aerosol Research, NAVENVPREDRSHFAC Contractor Report CR 78-03.
11. Monahan, E.C. (1971) Oceanic whitecaps, Jour. of Physical Oceanography, 1:139-144.

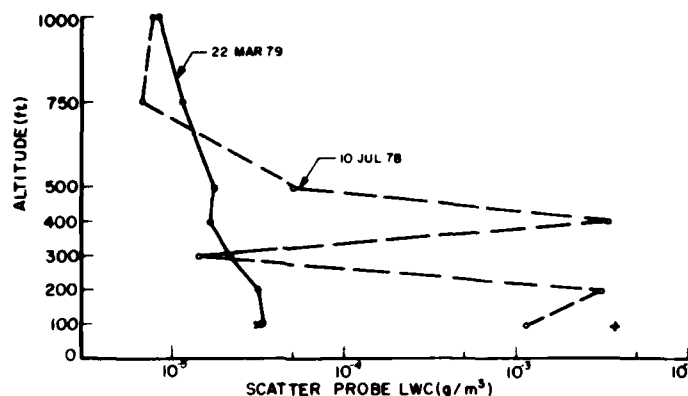


Figure 11. Liquid Water Content (LWC) vs Height

Blanchard¹² noted that whitecaps are affected by the temperature, but in these two sampling cases, the surface temperatures were almost identical. Blanchard also pointed out, as also Woodcock, that where whitecaps appear, there are numerous bubbles bursting near the surface. This mechanism was probably responsible for the large number counts at the lowest levels flown on 10 July.

Blanchard and Syzdek¹³ noted in their study of Aitken and giant nuclei particles with diameters of 10^{-1} to $10 \mu\text{m}$ that the number of these particles at a given location will vary with time. This may also be true of the particles in the 2- to 30-m range measured by our ASSP.

5. DISCUSSION OF DATA

Figure 12 shows the variation of computed liquid water content during each of the first five passes (at 100 through 500 ft MSL). There is relatively little change in liquid water content either with position or altitude, although slightly higher values occur in the lower levels. This may be due to the temperature inversion and lack of mixing which kept most particles close to the surface of the ocean. Variation during each straight-line pass was also small, possibly again due to the stable environment.

12. Blanchard, D. C. (1971) Whitecaps at sea, Jour. of the Atmospheric Sciences, 28:645.

13. Blanchard, D. C., and Syzdek, L. D. (1972) Variations in Aitken and giant nuclei in marine air, Journal of Physical Oceanography 2:255-262.

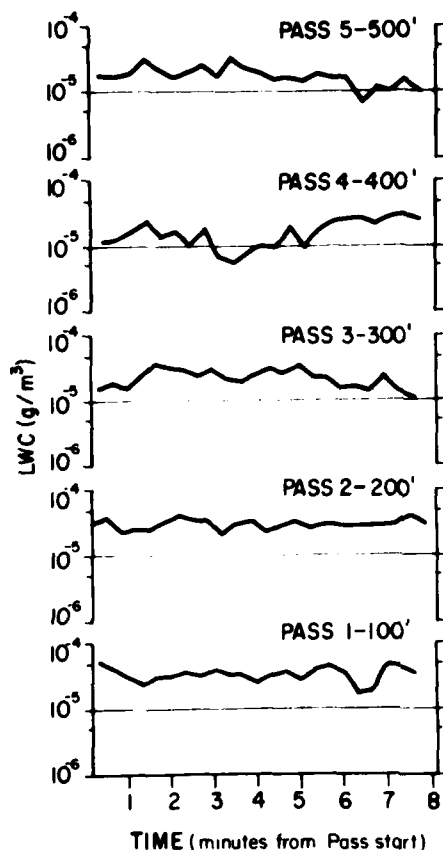


Figure 12. Liquid Water Content vs Time: Passes 1 to 5

On this flight, the liquid water content decreased with height except from 400 to 500 feet. This same altitude interval was the only one to show a decrease in temperature. The 500-ft level had a slightly better visibility than the lower levels; however, the visibility was improving with time. The visibility at 100 ft improved slightly from the time of Pass 1 (2215Z) to that of Pass 6 (2325Z). At the latter time, the distant sea fog seemed better defined. Changes in LWC in the horizontal,

Figure 13 shows the liquid water content vs time for Passes 6, 7, and 8. Pass 6 was a return to the 100-ft level. Although the mean liquid water content had changed little from Pass 1, the variation with time was somewhat greater. The windspeed was generally a little higher on Pass 6 than on Pass 1, and occasionally a small whitecap could be seen. The liquid water content at 750 ft is less than that seen at any of the lower levels. It is less than three-fourths of the LWC at 500 ft, and less than one-fourth of the LWC at 100 feet.

Figures 12 and 13 present axial scatter spectrometer probe (ASSP) data alone. Only an insignificant number of particles was observed in the higher range measured by the cloud probe. The FSSP replaced the precipitation probe, and no effort was made to record particles in the range greater than 300 μ m. However, it is safe to assume that the number of larger particles was negligible. The LWC reported by the FSSP was generally higher than that reported by the ASSP; however, several alignment problems were later discovered on the former, so only the latter data were considered in this study.

however, were very small as compared to the changes in LWC observed on the 10 July flight. The atmosphere was more stable on 22 March and, in general, particle content was small and decreased rather smoothly with height.

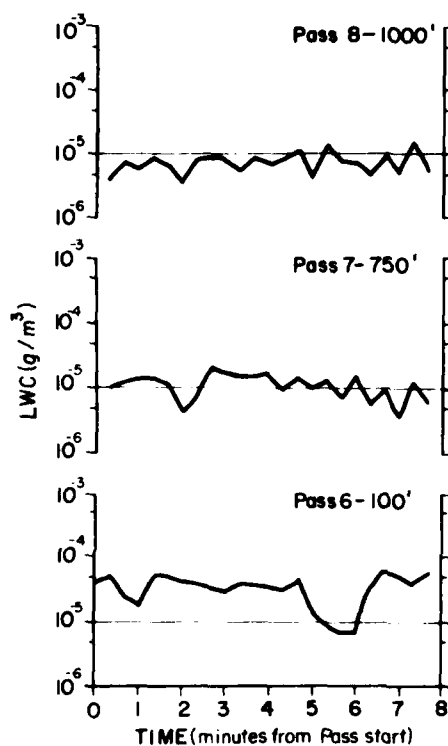


Figure 13. Liquid Water Content vs Time: Passes 6 to 8

Toba¹⁴ observed that the distribution of salt particles varied exponentially with height. The liquid water content above 500 ft appeared to drop off exponentially with height, and the slope of this line if extended downward, would pass quite close to all of the points observed at lower levels. The distribution of liquid water content with height appears to confirm this. Toba¹⁵ also noted that the distribution of eddy diffusivity varied with windspeed. This may help to explain why the particle distribution observed on the July 1978 flight was more irregular than that observed on the March 1979 flight. He also noted that an exponential wind profile would result in an exponential distribution of particles with height.

14. Toba, Y. (1965) On the giant sea salt particles in the atmosphere; I - General Features of the Distribution, Tellus 17:131-145.

15. Toba, Y. (1965) On the giant sea salt particles in the atmosphere; II - Theory of the Vertical Distribution in the 10 m layer over the Ocean, Tellus 17:365-382.

Figure 14 shows the profiles of wind with height at both ends of the sampling area. At the south end (55 nm SE of Hoquiam) the windspeed profile is quite close to exponential. Since the winds there during Passes 1 to 3 were recorded as "light and variable," the wind recorded in Pass 6 (4 knots) is used as representative of this level. At the north end (35 nm SE of Hoquiam), the wind profile is exponential through the first 4 passes, but above that it becomes random. Thus no definite conclusion as to the existence of an exponential profile can be drawn from these data.

Toba¹⁶ also noted that the world-wide salt particle distribution is affected by wind and humidity. Data from these flights support the supposition that wind affects such distributions. Unfortunately, the dew point hygrometer was inoperative on 22 March, so no humidity data are available.

Figure 15 shows how liquid water content, medium volume diameter, temperature, and altitude varied throughout the data gathering portion of this flight. A decrease in LWC with altitude is evident. The medium volume diameter, however, shows little if any trend. Thus the shape of the distribution is not changing; rather it is the number of particles which decrease as we get higher. As Figure 16 shows, the number of particles recorded by the 4, 10, and 18 μm size channels all decrease at approximately the same exponential rate, although the larger (18 μm) particles behave in a more erratic manner than do the smaller particles. The channel size noted represents the medium size of a 2 μm wide class. Therefore, the 4 μm line, for example, represents the total number of particles between 3 μm and 5 μm in diameter as a function of altitude.

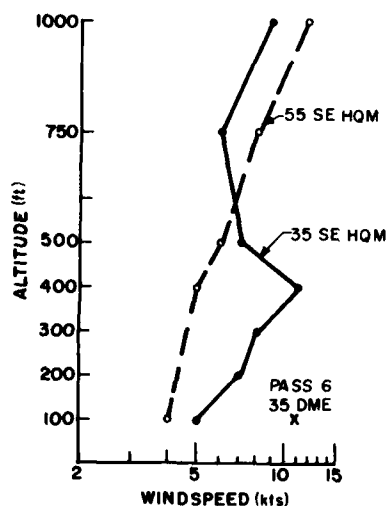


Figure 14. Wind vs Height at Ends of Sampling Area

16. Toba, Y. (1966) On the giant sea salt particles in the atmosphere; III - An estimate of the production and distribution over the world ocean, Tellus 18:132-135.

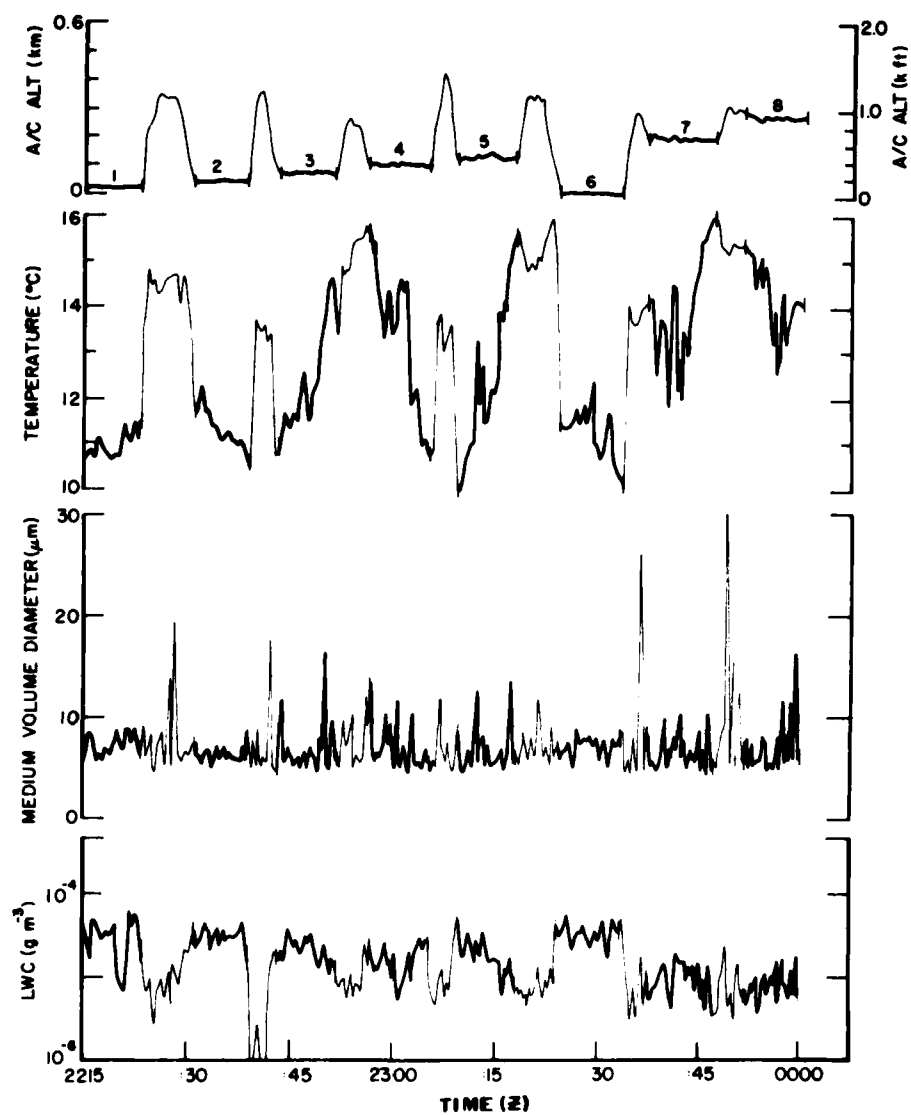


Figure 15. Liquid Water Content, Medium Volume Diameters, Temperature, and Altitude vs Time

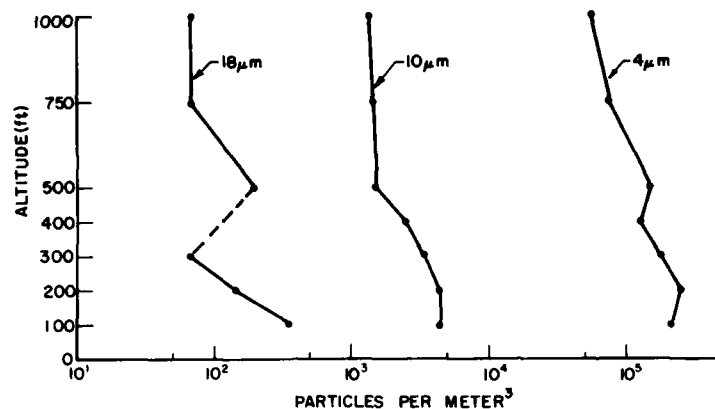


Figure 16. Particles per Cubic Meter vs Time

Figures 17 and 18 show the size distribution of particles during the 8 passes. Again, the number of particles drops off faster in this case than on the 10 July 1978 flight. In general, the curves are quite close to exponential. This is most striking between 4 and 12 μm . The distribution of larger particles is more sporadic. The variation of number of particles with altitude is also much less than it was on the 10 July flight.

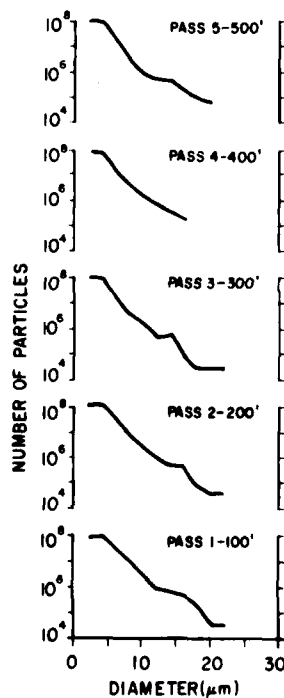


Figure 17. Particle Diameter vs Number Density: Passes 1 to 5

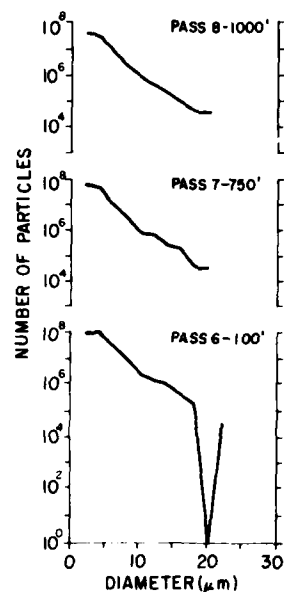


Figure 18. Particle Diameter
vs Number Density: Passes 6 to 8

6. CONCLUDING REMARKS

As a general rule, the data observed on this flight were closer to theoretical results than the data observed on 10 July 1978. The data did not show a wide variation in particle size distribution. Instead there was relatively uniform distribution of particles, and a nearly exponential decrease in LWC with altitude was observed. This may be due to the low surface windspeeds and the resulting absence of whitecaps. Small particles were observed even in a no-wind, no-cloud situation, but their number was considerably smaller than the number observed on the 10 July flight.

Blanchard¹⁷ notes that the majority of particles that come from the sea are from bubbles that burst at the ocean surface. Blanchard and Woodcock¹⁸ describe four mechanisms for bubble production: Two of the four, rain and snow, did not apply to either case; the third, whitecaps, applied much more to the first flight than to the second; the fourth, expansion of air trapped near the surface of the ocean due to warming at the surface, was probably occurring on both flights. Blanchard and Woodcock expect this fourth mechanism to be most active in spring

17. Blanchard, D.C. (1963) Electrification of the atmosphere by particles from bubbles at sea, Progress in Oceanography, Pergamon Press, New York, N.Y., pp 71-202.

18. Blanchard, D.C., and Woodcock, A.H. (1957) Bubble formation and modification in the sea and its meteorological significance, Tellus 9:145-158.

and summer, when the water is cooler than the air. This mechanism may be primarily responsible for those particles that did occur in the boundary layer observed on 22 March 1979.

Appendix A contains some of the transcribed comments of the Mission Directors aboard the aircraft during the 22 March flight. The data recorded by the ASSP are presented in Appendices B and C.

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1. Varley, D. J. (1979) A Marine Boundary Layer Sampling Flight in Clear Air, ERP No. 652, AFGL-TR-79-0013, AD A069723.
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10. Podzimek, J. (1976) Literature Survey of Marine Aerosol Research, NAVENVPREDRSHFAC Contractor Report CR 78-03.

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11. Monahan, E.C. (1971) Oceanic whitecaps, Jour. of Physical Oceanography, 1:139-144.
12. Blanchard, D.C. (1971) Whitecaps at sea, Jour. of the Atmospheric Sciences, 28:645.
13. Blanchard, D.C., and Syzdek, L.D. (1972) Variations in Aitken and giant nuclei in marine air, Journal of Physical Oceanography 2:255-262.
14. Toba, Y. (1965) On the giant sea salt particles in the atmosphere; I - General Features of the Distribution, Tellus 17:131-145.
15. Toba, Y. (1965) On the giant sea salt particles in the atmosphere; II - Theory of the Vertical Distribution in the 10 m layer over the Ocean, Tellus 17:365-382.
16. Toba, Y. (1966) On the giant sea salt particles in the atmosphere; III - An estimate of the production and distribution over the world ocean, Tellus 18:132-135.
17. Blanchard, D.C. (1963) Electrification of the atmosphere by particles from bubbles at sea, Progress in Oceanography, Pergamon Press, New York, N.Y., pp 71-202.
18. Blanchard, D.C., and Woodcock, A.H. (1957) Bubble formation and modification in the sea and its meteorological significance, Tellus 9:145-158.

Appendix A

Transcript of Notes and Voice Tape Mission 79-27, 22-23 March 1979

The following are excerpts from a transcript of the notes and voice tape made by the Mission Directors (the author and Mr. Donald McLeod) during the flight of 22 March 1979.

<u>Time</u>	<u>Comment</u>
21:24:44Z	Take off from McChord AFB, Washington.
47:25	Over Hoquiam.
48:25	Over the shoreline. Altitude: 5,000 feet.
49:25	Over water; hazy; no clouds.
52:22	Going south. Surface wind estimate 270 degrees at 5 knots. No whitecaps.
22:01:31	Level at 100 ft for a practice run.
04:30	Starting a turn to prepare for first data run.
07:00	Altitude: 700 feet. Turning. Crew sights porpoises.
09:15	No whitecaps.
10:40	Fog bank to the left.
11:10	Beginning a left turn toward Hoquiam.
15:00	Stable at 100 ft, beginning Pass 1.
16:42	Altitude 100 ft, wind light and variable. Clear above. Visibility 7+.

<u>Time</u>	<u>Comment</u>
22:18:00	No whitecaps. Ride exceptionally smooth.
23:30	Stop Pass.
31:00	Start Pass 2. Altitude 200 feet. Still no clouds above.
33:00	Weather clear.
34:00	Crew sights a whale.
39:00	End of pass.
41:00	Fog bank east of the aircraft.
43:30	Begin Pass 3. Altitude 300 feet.
45:00	Temperature = 14°C. Looks like the top of an inversion. Haze layer top is visible.
49:40	Passed a buoy seen near the end of Pass 1.
52:00	End Pass.
58:00	Begin Pass 4. Visibility still good. Wind stronger - 090/13.
59:20	39 DME from Hoquiam. Altitude: 300 feet.
23:03:14	Fog bank to the east of airplane is still there. The leading edge is getting billowy.
23:05:30	End of Pass 4.
09:20	Fog bank closer than before.
10:00	In Pass 5: at 500 feet.
18:00	End of Pass.
20:09	At 1000 ft in a turn. Visibility at 1000 ft much better than at 100 to 500 feet.
25:30	Begin Pass 6. Wind 360/11 at 100 feet.
26:50	Visibility has improved since first pass. Temperature went up to 13.9°C.
31:26	Fog bank has appeared again.
31:45	Fog bank is 100 ft high.
33:00	End of Pass 6.
37:10	Low stratus looks like type cloud seen at 10,000 ft, but is actually at 50 feet.
39:00	Begin Pass 7 at 750 feet.
39:55	Low stratus cloud over end of orbit.
42:20	In the clear, cloud bank to the right.
44:00	8 nm left in pass. Haze seems to be increasing.
46:40	Isolated whitecaps visible.
47:30	Pass 7 is over. Climbing to 1000 feet.
52:00	Begin Pass 8 at 1000 feet.
53:10	Temperature: 17.3°C. Wind: 039/09.

<u>Time</u>	<u>Comment</u>
23:54:00	Fog off to the horizon. Clear except for one small cirrus patch.
55:00	Wind decreases as we get farther from Hoquiam.
58:45	One mile left in pass. No clouds except sea fog.
00:00:00	End of last pass. Climbing to 2000 feet.
01:00	Cleared to 5000 feet. Going to Astoria (for other work).
01:03:58	Land at McChord AFB.

Appendix B

Average Particle Distributions for Each Pass

Average particle distributions from the PMS Axial Scattering Spectrometer Probe are presented for each of the eight sampling passes.

The actual altitude of each pass is given at the top of the printout. The pressure altitude, based on an altimeter setting of 29.92 in. Hg, is listed in each printout as "PR-ALT".

The particle option type "Rain" was selected for liquid water content (LWC) computations since most of the particles can be expected to be water droplets. Other types of particles (for example, salt crystals) were not considered numerous enough to affect the LWC.

The LWC and Med D (medium volume diameters) have units of g m^{-3} and μm , respectively.

Liquid water content, Med D, and Z (reflectivity) are for the Axial Scattering Spectrometer Probe only.

Multiplying the distribution numbers by 0.002 mm will convert from the normalized distribution units of $[\text{m}^3\text{-mm}]^{-1}$ to unnormalized units of m^{-3} .

PASS 1 - 100 Ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
480 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22:15:00*

PARTICLE SIZE DISTRIBUTIONS		PRESS (MB)
SIZE(MU)	NUMBER/(M**3-MM)	1025.69
2	9.28E+07	
4	1.07E+08	PR ALT(KM)
6	2.90E+07	-.10
8	1.05E+07	
10	2.80E+06	T 10.92C
12	8.50E+05	
14	6.14E+05	TAS (M/S)
16	4.09E+05	76.27
18	1.71E+05	
20	3.39E+04	Z 7.33E-08
22	3.45E+04	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.40E-05 MED D 7

PASS 3 - 300 Ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
480 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22:43:30*

PARTICLE SIZE DISTRIBUTIONS		PRESS (MB)
SIZE(MU)	NUMBER/(M**3-MM)	1018.92
2	1.25E+08	
4	8.92E+07	PR ALT(KM)
6	1.70E+07	-.05
8	3.89E+06	
10	1.64E+06	T 12.37C
12	4.69E+05	
14	6.32E+05	TAS (M/S)
16	1.01E+05	77.72
18	3.34E+04	
20	3.37E+04	Z 4.13E-08
22	3.32E+04	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 2.17E-05 MED D 6

PASS 2 - 200 Ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
480 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22:31:00*

PARTICLE SIZE DISTRIBUTIONS		PRESS (MB)
SIZE(MU)	NUMBER/(M**3-MM)	1022.48
2	1.33E+08	
4	1.23E+08	PR ALT(KM)
6	2.90E+07	-.08
8	7.05E+06	
10	2.20E+06	T 11.37C
12	8.31E+05	
14	4.31E+05	TAS (M/S)
16	3.67E+05	77.99
18	6.77E+04	
20	3.25E+04	Z 5.74E-08
22	3.31E+04	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.17E-05 MED D 6

PASS 4 - 400 Ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
480 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22:58:00*

PARTICLE SIZE DISTRIBUTIONS		PRESS (MB)
SIZE(MU)	NUMBER/(M**3-MM)	1014.84
2	9.05E+07	
4	6.71E+07	PR ALT(KM)
6	1.23E+07	-.01
8	3.38E+06	
10	1.25E+06	T 12.99C
12	6.45E+05	
14	3.42E+05	TAS (M/S)
16	1.70E+05	76.85
18	0.	
20	0.	Z 2.34E-08
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 1.64E-05 MED D 6

PASS 5 - 500 Ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
400 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23:10:00*

PARTICLE SIZE DISTRIBUTIONS		PRESS (MB)
SIZE(MU)	NUMBER/(M**3-MM)	1011.67
2	1.06E+08	
4	7.48E+07	PR ALT(KM)
6	1.34E+07	.01
8	2.90E+06	
10	7.77E+05	T 12.56C
12	4.69E+05	
14	4.05E+05	TAS (M/S)
16	1.69E+05	77.27
18	1.00E+05	
20	6.73E+04	Z 3.82E-08
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	
LWC	1.77E-05	MED D 6

PASS 6 - 100 Ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
400 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23:25:30*

PARTICLE SIZE DISTRIBUTIONS		PRESS (MB)
SIZE(MU)	NUMBER/(M**3-MM)	1026.29
2	1.16E+08	
4	1.11E+08	PR ALT(KM)
6	2.55E+07	-.11
8	7.85E+06	
10	2.52E+06	T 11.30C
12	1.29E+06	
14	1.02E+06	TAS (M/S)
16	4.09E+05	76.49
18	1.69E+05	
20	0.	Z 7.55E-08
22	3.44E+04	
24	0.	
26	0.	
28	0.	
30	0.	
LWC	3.36E-05	MED D 7

PASS 7 - 750 Ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
400 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23:39:00*

PARTICLE SIZE DISTRIBUTIONS		PRESS (MB)
SIZE(MU)	NUMBER/(M**3-MM)	1002.73
2	5.60E+07	
4	3.83E+07	PR ALT(KM)
6	8.02E+06	.09
8	2.22E+06	
10	7.31E+05	T 14.01C
12	5.33E+05	
14	2.31E+05	TAS (M/S)
16	1.67E+05	78.30
18	3.28E+04	
20	3.33E+04	Z 2.47E-08
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	
LWC	1.11E-05	MED D 6

PASS 8 - 1000 Ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
400 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23:52:00*

PARTICLE SIZE DISTRIBUTIONS		PRESS (MB)
SIZE(MU)	NUMBER/(M**3-MM)	993.90
2	3.99E+07	
4	2.82E+07	PR ALT(KM)
6	6.57E+06	.16
8	1.68E+06	
10	6.59E+05	T 14.19C
12	3.63E+05	
14	1.65E+05	TAS (M/S)
16	6.59E+04	78.91
18	3.33E+04	
20	3.28E+04	Z 1.80E-08
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	
LWC	8.28E-06	MED D 6

Appendix C

Average Particle Distributions for 20-Second Pass Averages

Average particle distributions for selected 20-second periods during the data-gathering portions of the flight are presented. Ten minutes of data are presented for each of the eight passes. This includes two minutes of data outside the time limit of each pass. During this time, the aircraft may have been climbing and/or turning to prepare for the next pass. The actual start time for each pass is given in Appendix B where it is listed as "Interval Start."

An explanation of some of the elements in the display can be found in Appendix B.

PAGE 1 --- 100 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22115100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1025.67	PR ALT(KM) -10	T 10.72C TAS (M/S) 76.70	Z 2.46E-04	WED D 5
2	1.89E+00				
4	1.55E+00				
6	4.83E+07				
8	1.14E+07				
10	1.83E+06				
12	8.17E+05				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LMC	4.11E-05				

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22115140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1025.92	PR ALT(KM) -10	T 13.84C TAS (M/S) 75.76	Z 5.22E-04	WED D 8
2	2.37E+07				
4	3.23E+07				
6	1.97E+07				
8	8.23E+06				
10	4.09E+06				
12	8.27E+05				
14	0.				
16	8.15E+05				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LMC	2.27E-05				

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22116100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1025.73	PR ALT(KM) -10	T 10.67C TAS (M/S) 75.45	Z 2.85E-07	WED D 6
2	1.22E+00				
4	1.35E+00				
6	3.14E+07				
8	1.32E+07				
10	2.47E+06				
12	0.				
14	8.27E+05				
16	0.				
18	0.23E+05				
20	0.				
22	8.68E+05				
24	0.				
26	0.				
28	0.				
30	0.				
LMC	4.85E-05				

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22115120*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1025.86	PR ALT(KM) -10	T 10.69C TAS (M/S) 76.34	Z 3.03E-08	WED D 6
2	2.00E+00				
4	2.13E+00				
6	4.16E+07				
8	2.37E+07				
10	8.19E+05				
12	0.				
14	8.20E+05				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LMC	4.84E-05				

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22116100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1025.57	PR ALT(KM) -10	T 10.87C TAS (M/S) 74.53	Z 3.49E-04	WED D 8
2	3.35E+06				
4	1.94E+07				
6	1.92E+07				
8	5.12E+06				
10	2.52E+06				
12	8.32E+05				
14	8.39E+05				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LMC	1.64E-05				

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22116140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1025.74	PR ALT(KM) -10	T 10.73C TAS (M/S) 76.52	Z 8.35E-08	WED D 7
2	1.25E+00				
4	1.46E+00				
6	3.39E+07				
8	1.30E+07				
10	4.15E+06				
12	2.45E+06				
14	8.12E+05				
16	8.23E+05				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LMC	4.71E-05				

PASS 1 --- 100 %.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2217100*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M+3-MM)	PRESS (MB) 1025.47	PR A.T (KM) --10	T 11.11C	TAS (M/S) 76.93	Z 6.19E-04
2	1.44E+08				
4	1.31E+08				
6	3.65E+07				
8	5.88E+06				
10	1.63E+06				
12	8.02E+05				
14	8.11E+05				
16	8.15E+05				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LMC 3.92E-15 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2217140*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M+3-MM)	PRESS (MB) 1325.93	PR A.T (KM) --10	T 10.91C	TAS (M/S) 77.80	Z 2.94E-08
2	1.22E+08				
4	1.24E+08				
6	3.32E+07				
8	1.13E+07				
10	2.44E+06				
12	0.				
14	1.63E+06				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LMC 3.31E-15 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2218120*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M+3-MM)	PRESS (MB) 1825.81	PR A.T (KM) --10	T 10.75C	TAS (M/S) 76.88	Z 8.24E-08
2	1.13E+08				
4	1.14E+08				
6	3.25E+07				
8	1.22E+07				
10	2.44E+06				
12	0.89E+05				
14	0.				
16	0.				
18	0.13E+05				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LMC 3.53E-15 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2217120*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M+3-MM)	PRESS (MB) 1825.60	PR A.T (KM) --10	T 10.98C	TAS (M/S) 77.90	Z 3.20E-08
2	1.38E+08				
4	1.47E+08				
6	3.52E+07				
8	1.24E+07				
10	3.27E+06				
12	1.63E+06				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LMC 3.68E-05 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2218100*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M+3-MM)	PRESS (MB) 1825.84	PR A.T (KM) --10	T 10.78C	TAS (M/S) 76.22	Z 2.81E-08
2	1.24E+08				
4	1.32E+08				
6	2.78E+07				
8	9.03E+06				
10	1.64E+06				
12	0.16E+05				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LMC 2.86E-05 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2218140*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M+3-MM)	PRESS (MB) 1825.83	PR A.T (KM) --10	T 10.84C	TAS (M/S) 76.71	Z 3.42E-08
2	1.11E+08				
4	1.12E+08				
6	3.39E+07				
8	1.88E+07				
10	2.44E+06				
12	0.				
14	0.16E+05				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LMC 3.42E-15 MED D 6

PASS 1 --- 100 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2219100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1025.69	PR A.T(KM) -1.10	T 10.67C	TAS (M/S) 76.64	Z 5.15E-04	WED D 6
2	1.04E+08					
4	1.21E+08					
6	2.85E+07					
8	9.77E+06					
10	2.44E+06					
12	9.15E+05					
14	0.					
16	0.14E+05					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					
LWC	3.25E-15					

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2219140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1025.07	PR A.T(KM) -1.10	T 10.80C	TAS (M/S) 75.92	Z 1.25E-07	WED D 7
2	1.05E+08					
4	1.21E+08					
6	3.04E+07					
8	1.07E+07					
10	4.93E+06					
12	0.					
14	0.25E+05					
16	0.25E+05					
18	3.19E+05					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					
LWC	4.23E-15					

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2219120*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1025.69	PR A.T(KM) -1.10	T 10.90C	TAS (M/S) 75.07	Z 0.74E-09	WED D 7
2	1.65E+06					
4	1.09E+07					
6	9.86E+06					
8	2.46E+06					
10	2.47E+06					
12	0.					
14	0.					
16	0.					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					
LWC	0.37E-16					

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2219120*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1026.71	PR A.T(KM) -1.10	T 13.78C	TAS (M/S) 76.71	Z 3.12E-04	WED D 6
2	9.99E+07					
4	1.24E+08					
6	3.15E+07					
8	7.31E+06					
10	4.07E+06					
12	0.					
14	0.10E+05					
16	0.					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					
LWC	3.10E-15					

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2219140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1345.63	PR A.T(KM) -1.10	T 10.74C	TAS (M/S) 75.44	Z 2.82E-08	WED D 6
2	3.15E+06					
4	3.15E+06					
6	1.05E+07					
8	4.96E+06					
10	1.65E+06					
12	0.28E+05					
14	0.29E+05					
16	0.					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					
LWC	1.44E-15					

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2219140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1325.32	PR A.T(KM) -1.10	T 11.23C	TAS (M/S) 76.19	Z 0.13E-09	WED D 6
2	6.54E+06					
4	1.47E+07					
6	1.06E+07					
8	0.					
10	0.24E+05					
12	0.15E+05					
14	0.					
16	0.					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					
LWC	6.54E-16					

PASS 1 --- 100 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2212100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M+3-MM)	PRESS (MB) 1025.57	PR A.T.(KM) -1.10	T 11.33C	TAS (M/S) 76.39	Z 5.63E-09
2	4.0E+06				
4	1.14E+07				
6	1.22E+07				
8	3.26E+06				
10	8.14E+05				
12	0.				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 7.42E-35 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2212140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M+3-MM)	PRESS (MB) 1125.78	PR A.T.(KM) -1.10	T 11.04C	TAS (M/S) 75.71	Z 2.38E-07
2	1.07E+08				
4	1.44E+08				
6	1.79E+07				
8	1.73E+07				
10	3.23E+06				
12	1.65E+06				
14	0.24E+05				
16	0.24E+05				
18	1.64E+06				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 5.25E-05 MED D 4

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2212180*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M+3-MM)	PRESS (MB) 1025.71	PR A.T.(KM) -1.10	T 11.45C	TAS (M/S) 76.49	Z 1.43E-07
2	1.52E+08				
4	1.23E+08				
6	2.61E+07				
8	6.15E+06				
10	2.45E+06				
12	8.14E+05				
14	0.17E+05				
16	0.				
18	0.14E+05				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 3.74E-35 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2212120*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M+3-MM)	PRESS (MB) 1025.75	PR A.T.(KM) -1.10	T 11.12C	TAS (M/S) 76.10	Z 7.05E-08
2	2.63E+07				
4	4.75E+07				
6	2.10E+07				
8	1.31E+07				
10	3.28E+06				
12	0.24E+05				
14	3.27E+06				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 3.32E-35 MED D 8

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2212160*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M+3-MM)	PRESS (MB) 1025.57	PR A.T.(KM) -1.10	T 11.07C	TAS (M/S) 75.84	Z 1.12E-07
2	1.23E+08				
4	1.44E+08				
6	1.79E+07				
8	1.73E+07				
10	3.23E+06				
12	1.65E+06				
14	0.14E+05				
16	1.64E+06				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 5.25E-05 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2212140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M+3-MM)	PRESS (MB) 1025.57	PR A.T.(KM) -1.10	T 11.24C	TAS (M/S) 76.39	Z 1.01E-07
2	1.23E+08				
4	1.37E+08				
6	1.10E+07				
8	1.72E+07				
10	1.65E+06				
12	2.45E+06				
14	1.64E+06				
16	3.27E+06				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 5.70E-35 MED D 8

PAGE 1 --- 100 FE.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22123100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB) 1025.93	PR ALT(KM) -1.10	T (11.08C)	TAS (M/S) 77.81	Z (1.04E-07)
2	1.37E+00					
4	1.43E+00					
6	3.37E+07					
8	1.52E+07					
10	5.47E+06					
12	8.11E+05					
14	2.43E+06					
16	8.99E+05					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					
LWC	5.23E-05					
MED D	7					

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22123140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB) 1315.73	PR ALT(KM) -0.02	T (13.63C)	TAS (M/S) 78.04	Z (2.30E-08)
2	9.42E+07					
4	5.81E+07					
6	1.20E+07					
8	1.59E+06					
10	1.59E+06					
12	0.					
14	7.96E+05					
16	0.					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					
LWC	1.43E-05					
MED D	5					

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22124120*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB) 999.36	PR ALT(KM) .12	T (14.03C)	TAS (M/S) 81.81	Z (4.67E-09)
2	2.98E+07					
4	2.97E+07					
6	4.58E+06					
8	3.05E+06					
10	7.66E+05					
12	0.					
14	0.					
16	0.					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					
LWC	6.72E-06					
MED D	6					

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22123123*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB) 1025.44	PR ALT(KM) -1.10	T (11.49C)	TAS (M/S) 78.44	Z (6.75E-08)
2	1.32E+00					
4	1.18E+00					
6	1.39E+07					
8	7.96E+06					
10	7.99E+05					
12	0.					
14	0.					
16	1.59E+06					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					
LWC	2.93E-05					
MED D	6					

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22124100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB) 1003.63	PR ALT(KM) .08	T (14.09C)	TAS (M/S) 79.73	Z (1.96E-08)
2	6.51E+07					
4	3.22E+07					
6	3.14E+06					
8	3.14E+06					
10	2.34E+06					
12	1.56E+06					
14	0.					
16	0.					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					
LWC	1.10E-05					
MED D	0					

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22124140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB) 997.53	PR ALT(KM) .13	T (14.43C)	TAS (M/S) 84.26	Z (6.60E-09)
2	3.43E+07					
4	2.93E+07					
6	3.59E+06					
8	3.66E+06					
10	1.49E+06					
12	0.					
14	0.					
16	0.					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					
LWC	7.50E-06					
MED D	7					

PAGE 2 --- 200 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22131100*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M**3-MM)	PRESS (MB) 1022.74	PR ALT (KM) -0.08	T 11.94C	TAS (M/S) 76.92	Z 5.94E-08
2	1.27E+08				
4	9.48E+07				
6	2.27E+07				
8	5.65E+06				
10	4.87E+06				
12	1.62E+06				
14	0.				
16	8.07E+05				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 3.09E-05 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22131100*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M**3-MM)	PRESS (MB) 1022.31	PR ALT (KM) -0.08	T 12.10C	TAS (M/S) 76.86	Z 3.32E-08
2	1.13E+08				
4	9.74E+07				
6	1.75E+07				
8	1.62E+06				
10	8.14E+05				
12	8.39E+05				
14	1.61E+06				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 2.25E-05 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22132100*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M**3-MM)	PRESS (MB) 1022.30	PR ALT (KM) -0.08	T 11.83C	TAS (M/S) 79.27	Z 2.17E-08
2	1.29E+08				
4	1.17E+08				
6	3.07E+07				
8	5.50E+06				
10	0.				
12	0.				
14	7.88E+05				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 2.51E-05 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22131100*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M**3-MM)	PRESS (MB) 1022.48	PR ALT (KM) -0.08	T 11.63C	TAS (M/S) 77.14	Z 8.77E-08
2	1.11E+08				
4	1.14E+08				
6	2.90E+07				
8	1.05E+07				
10	3.22E+06				
12	1.51E+06				
14	0.				
16	1.62E+06				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 3.09E-05 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22132100*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M**3-MM)	PRESS (MB) 1022.68	PR ALT (KM) -0.08	T 12.25C	TAS (M/S) 78.52	Z 6.51E-08
2	1.37E+08				
4	8.89E+07				
6	2.77E+07				
8	0.				
10	1.59E+06				
12	0.				
14	0.				
16	1.59E+06				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 2.50E-05 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22132100*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M**3-MM)	PRESS (MB) 1022.19	PR ALT (KM) -0.07	T 11.69C	TAS (M/S) 78.93	Z 3.67E-08
2	1.48E+08				
4	1.26E+08				
6	2.84E+07				
8	9.47E+06				
10	3.16E+06				
12	7.90E+05				
14	7.90E+05				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 3.28E-05 MED D 6

PASS 2 --- 200 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2213300*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	1.11E+08	1022.51
4	1.10E+08	PR ALT(KM)
6	4.42E+07	-08
8	1.10E+07	T 11.03C
10	3.94E+06	TAS (M/S)
12	7.89E+05	79.07
14	7.90E+05	Z 6.96E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 4.10E-05 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2213340*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	1.03E+08	1022.85
4	1.05E+08	PR ALT(KM)
6	2.97E+07	-08
8	8.87E+06	T 11.41C
10	4.03E+06	TAS (M/S)
12	0.	77.51
14	1.50E+06	Z 4.68E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.57E-05 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2213420*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	1.10E+08	1022.68
4	1.44E+08	PR ALT(KM)
6	7.00E+07	-08
8	7.29E+06	T 11.43C
10	2.44E+06	TAS (M/S)
12	0.	76.90
14	0.	Z 4.50E-08
16	8.15E+05	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 7.18E-05 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2213320*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	1.36E+08	1022.44
4	1.16E+08	PR ALT(KM)
6	2.90E+07	-08
8	7.06E+06	T 11.47C
10	7.84E+05	TAS (M/S)
12	0.	79.58
14	7.82E+05	Z 1.48E-07
16	0.	
18	7.80E+05	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.58E-05 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2213400*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	1.28E+08	1022.64
4	1.23E+08	PR ALT(KM)
6	2.70E+07	-08
8	3.27E+06	T 11.43C
10	1.53E+06	TAS (M/S)
12	0.	76.29
14	0.	Z 1.08E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 2.27E-05 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2213440*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	1.10E+08	1022.29
4	1.2E+08	PR ALT(KM)
6	2.79E+07	-07
8	6.38E+06	T 11.30C
10	1.59E+06	TAS (M/S)
12	0.	78.15
14	7.34E+05	Z 2.11E-07
16	0.	
18	0.	
20	0.	
22	7.96E+05	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.56E-05 MED D 7

PASS 2 --- 200 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START1 *22135100*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB) 1022.06	PR ALT (KM) -0.07	T (11.08C)	TAS (M/S) 76.84	Z (1.95E-04)
2	1.34E+08					
4	1.15E+08					
6	2.51E+07					
8	7.31E+06					
10	1.56E+06					
12	7.92E+05					
14	0.					
16	0.					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					

LMC 2.51E-05 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START1 *22135140*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB) 1022.42	PR ALT (KM) -0.03	T (11.23C)	TAS (M/S) 79.12	Z (5.17E-04)
2	1.43E+08					
4	1.21E+08					
6	2.76E+07					
8	6.57E+06					
10	3.15E+06					
12	3.15E+06					
14	7.84E+05					
16	0.					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					

LMC 3.61E-05 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START1 *22136120*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB) 1022.55	PR ALT (KM) -0.04	T (11.10C)	TAS (M/S) 79.22	Z (3.64E-04)
2	1.20E+08					
4	1.14E+08					
6	2.91E+07					
8	9.47E+06					
10	3.14E+06					
12	7.82E+05					
14	7.82E+05					
16	0.					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					

LMC 3.17E-05 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START1 *22135120*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB) 1022.37	PR ALT (KM) -0.04	T (11.12C)	TAS (M/S) 78.99	Z (2.42E-04)
2	1.27E+08					
4	1.17E+08					
6	3.18E+07					
8	1.03E+07					
10	7.91E+05					
12	1.58E+06					
14	0.					
16	0.					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					

LMC 2.08E-05 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START1 *22136140*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB) 1022.34	PR ALT (KM) -0.08	T (11.26C)	TAS (M/S) 79.45	Z (3.34E-04)
2	1.37E+08					
4	1.13E+08					
6	2.43E+07					
8	5.51E+06					
10	3.14E+06					
12	7.84E+05					
14	7.84E+05					
16	0.					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					

LMC 2.87E-05 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START1 *22136140*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB) 1022.60	PR ALT (KM) -0.04	T (11.03C)	TAS (M/S) 77.73	Z (3.02E-04)
2	1.44E+08					
4	1.27E+08					
6	2.97E+07					
8	6.73E+06					
10	1.82E+06					
12	2.41E+06					
14	0.					
16	0.					
18	0.					
20	0.					
22	0.					
24	0.					
26	0.					
28	0.					
30	0.					

LMC 3.13E-05 MED D 6

PASS 2 --- 200 ft.

MARINE BOUNDARY LAYER STUDY SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START1 *22137140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	1.45E+08	1022.74
4	1.20E+08	PR ALT(KM)
6	1.20E+07	-0.0
8	7.31E+06	T 11.06C
10	2.45E+06	TAS (M/S)
12	8.13E+05	76.60
14	0.	Z 4.10E-03
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 2.99E-05 MED D 5

MARINE BOUNDARY LAYER STUDY SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START1 *22137140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	1.29E+08	1022.3
4	1.38E+08	PR ALT(KM)
6	3.12E+07	-0.0
8	9.59E+06	T 10.97C
10	8.11E+05	TAS (M/S)
12	0.	77.69
14	0.	Z 4.23E-03
16	7.99E+05	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.14E-05 MED D 5

MARINE BOUNDARY LAYER STUDY SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START1 *22138020*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	1.52E+08	1022.58
4	1.34E+08	PR ALT(KM)
6	1.87E+07	-0.0
8	5.67E+06	T 10.92C
10	9.09E+05	TAS (M/S)
12	2.43E+06	77.06
14	0.	Z 1.13E-07
16	1.52E+06	
18	8.11E+05	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 4.23E-05 MED D 7

MARINE BOUNDARY LAYER STUDY SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START1 *22137140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	1.43E+08	1122.70
4	1.47E+08	PR ALT(KM)
6	1.39E+07	-0.0
8	7.31E+06	T 10.95C
10	2.44E+06	TAS (M/S)
12	0.	76.93
14	0.	Z 7.23E-08
16	0.	
18	8.14E+05	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.14E-05 MED D 5

MARINE BOUNDARY LAYER STUDY SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START1 *221381.0*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	1.77E+08	1022.56
4	1.57E+08	PR ALT(KM)
6	3.86E+07	-0.0
8	5.59E+06	T 11.06C
10	4.03E+06	TAS (M/S)
12	8.05E+05	77.37
14	0.	Z 2.46E-09
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.34E-05 MED D 5

MARINE BOUNDARY LAYER STUDY SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START1 *22138140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	1.72E+08	1022.14
4	1.57E+08	PR ALT(KM)
6	3.79E+07	-0.0
8	7.23E+06	T 10.85C
10	8.00E+05	TAS (M/S)
12	0.	77.48
14	1.61E+06	Z 3.31E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.41E-05 MED D 5

PASS 2 --- 200 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 179-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22139100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)	1320.99
2	1.35E+07	PR ALT(KM)	-0.06
4	2.00E+07	T	10.57C
6	1.34E+07	TAS (M/S)	78.67
8	3.16E+06	TAS (M/S)	78.67
10	2.17E+06	T	10.57C
12	0.	TAS (M/S)	78.67
14	0.	TAS (M/S)	78.67
16	8.03E+05	T	10.57C
18	0.	TAS (M/S)	78.67
20	0.	TAS (M/S)	78.67
22	0.	T	10.57C
24	0.	TAS (M/S)	78.67
26	0.	TAS (M/S)	78.67
28	0.	T	10.57C
30	0.	TAS (M/S)	78.67

LWC 1.34E-05 MED D 8

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 179-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22139100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)	1300.73
2	7.37E+05	PR ALT(KM)	.10
4	6.13E+06	T	12.69C
6	1.54E+06	TAS (M/S)	82.49
8	0.	TAS (M/S)	82.49
10	0.	T	12.69C
12	0.	TAS (M/S)	82.49
14	0.	TAS (M/S)	82.49
16	0.	T	12.69C
18	0.	TAS (M/S)	82.49
20	0.	TAS (M/S)	82.49
22	0.	T	12.69C
24	0.	TAS (M/S)	82.49
26	0.	TAS (M/S)	82.49
28	0.	T	12.69C
30	0.	TAS (M/S)	82.49

LWC 9.22E-07 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 179-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22140100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)	985.39
2	2.33E+06	PR ALT(KM)	.23
4	1.57E+06	T	13.55C
6	0.	TAS (M/S)	81.49
8	0.	TAS (M/S)	81.49
10	0.	T	13.55C
12	0.	TAS (M/S)	81.49
14	0.	TAS (M/S)	81.49
16	0.	T	13.55C
18	0.	TAS (M/S)	81.49
20	0.	TAS (M/S)	81.49
22	0.	T	13.55C
24	0.	TAS (M/S)	81.49
26	0.	TAS (M/S)	81.49
28	0.	T	13.55C
30	0.	TAS (M/S)	81.49

LWC 8.27E-07 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 179-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22139120*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)	1311.75
2	4.47E+06	PR ALT(KM)	-0.1
4	3.01E+06	T	10.79C
6	0.	TAS (M/S)	83.26
8	0.	TAS (M/S)	83.26
10	0.	T	10.79C
12	0.	TAS (M/S)	83.26
14	0.	TAS (M/S)	83.26
16	0.	T	10.79C
18	0.	TAS (M/S)	83.26
20	0.	TAS (M/S)	83.26
22	0.	T	10.79C
24	0.	TAS (M/S)	83.26
26	0.	TAS (M/S)	83.26
28	0.	T	10.79C
30	0.	TAS (M/S)	83.26

LWC 3.47E-06 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 179-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22140100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)	990.55
2	7.32E+05	PR ALT(KM)	.19
4	4.56E+06	T	13.72C
6	1.0E+06	TAS (M/S)	83.49
8	0.	TAS (M/S)	83.49
10	0.	T	13.72C
12	0.	TAS (M/S)	83.49
14	0.	TAS (M/S)	83.49
16	0.	T	13.72C
18	0.	TAS (M/S)	83.49
20	0.	TAS (M/S)	83.49
22	0.	T	13.72C
24	0.	TAS (M/S)	83.49
26	0.	TAS (M/S)	83.49
28	0.	T	13.72C
30	0.	TAS (M/S)	83.49

LWC 8.52E-07 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 179-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22140100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)	984.88
2	3.05E+06	PR ALT(KM)	.24
4	3.05E+06	T	13.44C
6	7.68E+05	TAS (M/S)	81.87
8	2.28E+06	TAS (M/S)	81.87
10	7.52E+05	T	13.44C
12	0.	TAS (M/S)	81.87
14	0.	TAS (M/S)	81.87
16	0.	T	13.44C
18	0.	TAS (M/S)	81.87
20	0.	TAS (M/S)	81.87
22	0.	T	13.44C
24	0.	TAS (M/S)	81.87
26	0.	TAS (M/S)	81.87
28	0.	T	13.44C
30	0.	TAS (M/S)	81.87

LWC 2.69E-06 MED D 8

PASS 3 --- 300 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22143100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1316.61	PR ALT (KM) -0.03	TAS (M/S) 75.26	Z (1.20E-04)
2	1.45E+08			
4	1.10E+08			
6	1.74E+07			
8	2.80E+06			
10	3.31E+06			
12	0.			
14	0.			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 2.00E-15 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22143140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1014.98	PR ALT (KM) -0.05	TAS (M/S) 76.70	Z (0.71E-09)
2	1.29E+08			
4	9.43E+07			
6	1.42E+07			
8	3.25E+06			
10	8.11E+05			
12	0.			
14	0.			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 1.56E-15 MED D 4

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22144120*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1018.78	PR ALT (KM) -0.05	TAS (M/S) 79.09	Z (2.34E-04)
2	1.22E+08			
4	6.87E+07			
6	5.52E+06			
8	3.14E+06			
10	0.			
12	0.			
14	1.51E+06			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 1.53E-15 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22143140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1018.85	PR ALT (KM) -0.05	TAS (M/S) 75.89	Z (7.32E-09)
2	1.71E+08			
4	1.19E+08			
6	9.86E+06			
8	6.11E+06			
10	0.21E+05			
12	0.			
14	0.			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 1.81E-15 MED D 4

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22144140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1015.75	PR ALT (KM) -0.05	TAS (M/S) 77.64	Z (6.49E-04)
2	1.05E+08			
4	5.62E+07			
6	7.21E+06			
8	1.01E+06			
10	7.99E+05			
12	8.13E+05			
14	1.60E+06			
16	8.35E+05			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 1.97E-15 MED D 11

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22144140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1019.05	PR ALT (KM) -0.05	TAS (M/S) 79.04	Z (1.99E-08)
2	1.38E+08			
4	1.14E+08			
6	1.91E+07			
8	3.35E+06			
10	3.16E+06			
12	7.85E+05			
14	0.			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 2.36E-15 MED D 5

PASS 3 --- 300 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22145100*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)
2	1.45E+08	1319.50
4	1.29E+08	PR ALT (KM)
6	2.66E+07	-05
8	1.13E+07	T 11.40C
10	3.24E+06	TAS (M/S)
12	0.11E+05	77.18
14	1.61E+06	Z 5.15E-03
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.63E-05 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22145140*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)
2	1.43E+08	1010.86
4	1.17E+08	PR ALT (KM)
6	2.71E+07	-05
8	1.51E+06	T 11.56C
10	2.33E+06	TAS (M/S)
12	0.	78.12
14	7.35E+05	Z 6.16E-08
16	0.31E+05	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 2.97E-05 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22146120*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)
2	1.26E+08	1311.08
4	1.33E+08	PR ALT (KM)
6	2.72E+07	-05
8	3.97E+06	T 11.75C
10	0.	TAS (M/S)
12	7.92E+05	78.67
14	1.58E+06	Z 3.59E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 2.84E-05 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22145120*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)
2	1.34E+08	1319.49
4	1.26E+08	PR ALT (KM)
6	2.73E+07	-05
8	4.01E+06	T 11.60C
10	2.22E+06	TAS (M/S)
12	0.17E+05	77.62
14	1.66E+06	Z 6.49E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.08E-05 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22146100*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)
2	1.25E+09	1010.74
4	1.16E+08	PR ALT (KM)
6	3.32E+07	-05
8	5.56E+06	T 11.50C
10	0.93E+05	TAS (M/S)
12	7.92E+05	78.54
14	0.	Z 1.41E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 2.39E-05 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22146160*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)
2	1.33E+08	1010.91
4	0.84E+07	PR ALT (KM)
6	1.43E+07	-05
8	3.17E+06	T 12.43C
10	1.55E+06	TAS (M/S)
12	0.	78.64
14	1.39E+06	Z 3.46E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 2.11E-05 MED D 6

PASS 3 --- 300 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22147100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1010.84	PR ALT(KM) -05	T 12.55C	TAS (M/S) 77.18	Z 1.59E-08
2	1.41E+08				
4	9.46E+07				
6	2.02E+07				
8	8.04E+05				
10	8.05E+05				
12	1.61E+06				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 1.99E-35 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22147100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1019.21	PR ALT(KM) -05	T 11.44C	TAS (M/S) 76.27	Z 3.52E-08
2	1.35E+08				
4	1.11E+08				
6	2.37E+07				
8	9.01E+06				
10	2.45E+06				
12	8.12E+05				
14	8.19E+05				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 2.99E-35 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22148120*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1010.80	PR ALT(KM) -05	T 12.03C	TAS (M/S) 77.04	Z 1.46E-07
2	1.35E+08				
4	1.06E+08				
6	2.51E+07				
8	4.85E+06				
10	8.07E+05				
12	0.				
14	0.				
16	0.12E+05				
18	0.				
20	9.10E+05				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 3.14E-35 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22147120*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1010.89	PR ALT(KM) -05	T 11.95C	TAS (M/S) 76.02	Z 1.63E-08
2	1.48E+08				
4	1.41E+08				
6	2.35E+07				
8	7.37E+06				
10	3.29E+06				
12	0.				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 2.45E-05 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22148100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1119.11	PR ALT(KM) -05	T 11.69C	TAS (M/S) 76.71	Z 1.32E-08
2	2.20E+08				
4	1.25E+08				
6	1.46E+07				
8	7.32E+06				
10	2.44E+06				
12	8.14E+05				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 2.58E-05 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22148140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1119.17	PR ALT(KM) -05	T 12.27C	TAS (M/S) 77.20	Z 3.61E-08
2	1.28E+08				
4	8.87E+07				
6	2.24E+07				
8	3.24E+06				
10	1.51E+06				
12	0.				
14	1.61E+06				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 2.32E-05 MED D 6

PASS 3 --- 300 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22149100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)	1010.90
2	1.17E+08	PR ALT(KM)	-0.05
4	8.62E+07	T	12.50C
6	1.77E+07	TAS (M/S)	77.51
8	8.38E+05	Z	2.39E-08
10	4.32E+06		
12	1.61E+06		
14	0.		
16	0.		
18	0.		
20	0.		
22	0.		
24	0.		
26	0.		
28	0.		
30	0.		

LWC 2.11E-35 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22149140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)	1010.98
2	9.05E+07	PR ALT(KM)	-0.05
4	4.14E+07	T	13.34C
6	7.4E+06	TAS (M/S)	79.76
8	3.92E+06	Z	2.35E-09
10	3.13E+06		
12	0.		
14	7.40E+05		
16	0.		
18	0.		
20	0.		
22	0.		
24	0.		
26	0.		
28	0.		
30	0.		

LWC 1.47E-35 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22150120*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)	1010.32
2	7.06E+07	PR ALT(KM)	-0.04
4	4.25E+07	T	13.94C
6	8.05E+06	TAS (M/S)	77.75
8	3.26E+06	Z	2.20E-07
10	8.06E+05		
12	0.		
14	0.		
16	8.08E+05		
18	0.		
20	0.		
22	7.90E+05		
24	0.		
26	0.		
28	0.		
30	0.		

LWC 2.20E-35 MED D 16

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22149120*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)	1010.44
2	1.15E+08	PR ALT(KM)	-0.04
4	8.26E+07	T	13.02C
6	1.27E+07	TAS (M/S)	78.50
8	2.38E+06	Z	7.00E-09
10	1.60E+06		
12	0.		
14	0.		
16	0.		
18	0.		
20	0.		
22	0.		
24	0.		
26	0.		
28	0.		
30	0.		

LWC 1.49E-05 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22150100*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)	1010.26
2	8.07E+07	PR ALT(KM)	-0.04
4	3.32E+07	T	13.74C
6	1.19E+07	TAS (M/S)	78.78
8	2.36E+06	Z	2.35E-08
10	7.00E+05		
12	8.02E+05		
14	7.89E+05		
16	0.		
18	0.		
20	0.		
22	0.		
24	0.		
26	0.		
28	0.		
30	0.		

LWC 1.43E-05 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22150140*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)	1010.07
2	8.07E+07	PR ALT(KM)	-0.05
4	5.27E+07	T	14.58C
6	1.23E+07	TAS (M/S)	78.81
8	2.40E+06	Z	1.68E-08
10	0.		
12	0.		
14	8.01E+05		
16	0.		
18	0.		
20	0.		
22	0.		
24	0.		
26	0.		
28	0.		
30	0.		

LWC 1.24E-35 MED D 5

PASS 3 --- 300 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22151400*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1318.92	PR ALT(KM) -0.05	T 14.68C	TAS (M/S) 77.23	Z 5.58E-09
2	8.40E+07				
4	5.73E+07				
6	8.87E+06				
8	0.				
10	1.61E+06				
12	0.				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	1.00E-15				
MED D	4				

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22151139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1018.96	PR ALT(KM) -0.05	T 13.94C	TAS (M/S) 76.27	Z 4.07E-08
2	7.36E+07				
4	4.45E+07				
6	1.47E+07				
8	2.45E+06				
10	8.17E+05				
12	8.26E+05				
14	0.				
16	8.26E+05				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	1.60E-15				
MED D	7				

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22152119*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1009.36	PR ALT(KM) 0.03	T 14.91C	TAS (M/S) 79.70	Z 9.79E-09
2	8.36E+07				
4	3.68E+07				
6	8.27E+06				
8	2.35E+06				
10	7.82E+05				
12	7.82E+05				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	9.56E-16				
MED D	6				

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22151420*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1319.18	PR ALT(KM) -0.05	T 14.49C	TAS (M/S) 76.41	Z 3.21E-08
2	9.14E+07				
4	4.28E+07				
6	4.91E+06				
8	1.63E+06				
10	2.44E+06				
12	1.63E+06				
14	0.19E+05				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	1.51E-15				
MED D	9				

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22151159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1017.57	PR ALT(KM) -0.04	T 13.33C	TAS (M/S) 78.87	Z 5.26E-09
2	7.70E+07				
4	4.58E+07				
6	1.27E+07				
8	4.76E+06				
10	0.				
12	0.				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	1.12E-15				
MED D	5				

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22152159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1003.37	PR ALT(KM) 0.03	T 14.65C	TAS (M/S) 82.28	Z 3.85E-09
2	5.32E+07				
4	4.05E+07				
6	4.93E+06				
8	1.55E+06				
10	7.59E+05				
12	0.				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	7.05E-16				
MED D	4				

PASS 4 --- 400 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22150159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1015.25	PR ALT(KM) -02	TAS (M/S) 75.68	Z (9.70E-08)
2	5.77E+07			
4	4.12E+07			
6	5.77E+06			
8	1.65E+06			
10	2.47E+06			
12	6.20E+05			
14	3.31E+06			
16	8.25E+05			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 2.43E-15 MED D 13

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22157139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1014.01	PR ALT(KM) -01	TAS (M/S) 76.06	Z (1.05E-08)
2	7.11E+07			
4	5.21E+07			
6	8.11E+06			
8	2.44E+06			
10	8.11E+05			
12	8.07E+05			
14	0.			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 1.12E-15 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22158119*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1015.00	PR ALT(KM) -02	TAS (M/S) 76.75	Z (0.49E-09)
2	8.12E+07			
4	4.37E+07			
6	9.74E+06			
8	3.25E+06			
10	2.43E+06			
12	0.			
14	0.			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 1.20E-15 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22157119*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1016.04	PR ALT(KM) -01	TAS (M/S) 76.96	Z (4.72E-08)
2	6.88E+07			
4	3.97E+07			
6	1.21E+07			
8	1.62E+06			
10	0.12E+05			
12	0.			
14	8.12E+05			
16	8.12E+05			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 1.52E-15 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22157159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1015.63	PR ALT(KM) -02	TAS (M/S) 77.15	Z (2.36E-08)
2	6.75E+07			
4	4.93E+07			
6	1.61E+07			
8	1.62E+06			
10	8.11E+05			
12	8.07E+05			
14	8.06E+05			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 1.39E-05 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *22158139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1015.97	PR ALT(KM) -02	TAS (M/S) 77.11	Z (1.32E-08)
2	9.76E+07			
4	4.85E+07			
6	7.26E+06			
8	4.47E+06			
10	1.62E+06			
12	0.45E+05			
14	0.			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 1.29E-15 MED D 6

PASS 4 --- 400 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22150159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MH)	PRESS (MB) 1015.34	PR ALT (KM) -0.02	TAS (M/S) 77.27	Z 2.27E-08
2	0.31E+07			
4	5.97E+07			
6	1.29E+07			
8	3.23E+06			
10	3.23E+06			
12	1.01E+06			
14	0.			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			
LWC	1.80E-15			1.0 D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22150159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MH)	PRESS (MB) 1014.40	PR ALT (KM) -0.02	TAS (M/S) 75.56	Z 3.10E-08
2	6.60E+07			
4	4.70E+07			
6	6.60E+06			
8	2.47E+06			
10	8.32E+05			
12	0.			
14	1.64E+05			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			
LWC	1.36E-15			1.0 D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23000139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MH)	PRESS (MB) 1015.25	PR ALT (KM) -0.02	TAS (M/S) 74.09	Z 0.76E-09
2	6.66E+07			
4	5.24E+07			
6	7.50E+06			
8	2.51E+06			
10	0.			
12	0.31E+05			
14	0.			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			
LWC	1.03E-15			1.0 D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22150159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MH)	PRESS (MB) 1015.49	PR ALT (KM) -0.02	TAS (M/S) 77.19	Z 3.31E-08
2	1.03E+06			
4	5.01E+07			
6	1.13E+07			
8	3.25E+06			
10	9.09E+05			
12	0.			
14	0.			
16	2.43E+06			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			
LWC	2.27E-05			1.0 D 9

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *22150159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MH)	PRESS (MB) 1014.03	PR ALT (KM) -0.02	TAS (M/S) 75.33	Z 5.02E-08
2	0.37E+07			
4	3.97E+07			
6	6.50E+06			
8	3.29E+06			
10	1.66E+06			
12	0.			
14	9.22E+05			
16	0.22E+05			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			
LWC	1.01E-05			1.0 D 9

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23000139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MH)	PRESS (MB) 1015.23	PR ALT (KM) -0.02	TAS (M/S) 76.79	Z 5.34E-08
2	5.52E+07			
4	2.50E+07			
6	5.69E+06			
8	4.31E+06			
10	1.61E+06			
12	0.44E+05			
14	2.44E+06			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			
LWC	1.77E-05			1.0 D 11

PASS 4 --- 400 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23100159*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MM)	PRESS (MB)	PR ALT (KM)	TAS (M/S)	Z (10E-09)
2	5.35E+07	1913.82			
4	2.71E+07		-1.00		
6	7.10E+06				
8	8.01E+05				
10	0.				
12	8.11E+05				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LMC 6.83E-36 MLD D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23101139*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MM)	PRESS (MB)	PR ALT (KM)	TAS (M/S)	Z (10E-09)
2	5.17E+07	1115.11			
4	2.30E+07		-0.82		
6	3.97E+06				
8	2.39E+06				
10	8.02E+05				
12	7.05E+05				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LMC 7.42E-36 MLD D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23102139*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MM)	PRESS (MB)	PR ALT (KM)	TAS (M/S)	Z (10E-09)
2	6.84E+07	1015.51			
4	6.67E+07		-0.82		
6	7.10E+06				
8	3.16E+06				
10	0.				
12	0.				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LMC 9.62E-36 MLD D 4

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23101159*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MM)	PRESS (MB)	PR ALT (KM)	TAS (M/S)	Z (10E-09)
2	4.83E+07	1913.92			
4	2.69E+07		-1.01		
6	8.58E+06				
8	7.08E+05				
10	0.				
12	0.				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LMC 5.49E-36 MLD D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23101159*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MM)	PRESS (MB)	PR ALT (KM)	TAS (M/S)	Z (10E-09)
2	4.14E+07	1016.66			
4	3.23E+07		-0.81		
6	7.08E+06				
8	1.61E+06				
10	1.61E+06				
12	8.4E+05				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LMC 9.41E-36 MLD D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23102139*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MM)	PRESS (MB)	PR ALT (KM)	TAS (M/S)	Z (10E-09)
2	1.23E+08	1015.37			
4	1.21E+08		-0.82		
6	2.25E+07				
8	2.4E+06				
10	0.				
12	0.				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LMC 1.9E-35 MLD D 4

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PASS 4 --- 400 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23102159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M+3-MM)	PRESS (MB) 1015.55
2 2.72E+07	PR ALT(KM) -0.02
4 2.14E+07	T 12.200
6 4.13E+06	TAS (M/S) 75.42
8 8.33E+05	Z 2.22E-08
10 8.28E+05	
12 8.23E+05	
14 8.24E+05	
16 0.	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 8.65E-36 MED D 10

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23101159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M+3-MM)	PRESS (MB) 1014.55
2 4.70E+08	PR ALT(KM) -0.01
4 1.19E+08	T 11.760
6 1.24E+07	TAS (M/S) 78.96
8 7.30E+06	Z 1.54E-08
10 7.95E+05	
12 7.96E+05	
14 0.	
16 0.	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 2.42E-35 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23104159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M+3-MM)	PRESS (MB) 1014.08
2 1.53E+08	PR ALT(KM) -0.01
4 1.22E+08	T 11.070
6 2.24E+07	TAS (M/S) 77.84
8 6.73E+06	Z 1.43E-08
10 7.1E+05	
12 7.74E+05	
14 0.	
16 0.	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 2.60E-35 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23103159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M+3-MM)	PRESS (MB) 1015.79
2 8.19E+07	PR ALT(KM) -0.02
4 8.66E+07	T 12.210
6 1.61E+07	TAS (M/S) 77.20
8 0.	Z 2.52E-08
10 1.62E+06	
12 7.39E+05	
14 8.10E+05	
16 0.	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 1.66E-35 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23101159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M+3-MM)	PRESS (MB) 1014.21
2 1.54E+08	PR ALT(KM) -0.01
4 1.19E+08	T 11.350
6 1.24E+07	TAS (M/S) 79.43
8 7.30E+06	Z 1.64E-08
10 7.95E+05	
12 7.96E+05	
14 0.	
16 0.	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 2.59E-35 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23104159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M+3-MM)	PRESS (MB) 1015.44
2 1.26E+08	PR ALT(KM) -0.02
4 1.22E+08	T 11.190
6 1.54E+07	TAS (M/S) 75.83
8 4.73E+06	Z 1.22E-08
10 0.	
12 8.19E+05	
14 0.	
16 0.	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 2.05E-35 MED D 5

PASS 4 ---- 400 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23104159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MJ) NUMBER/(M**3-MM)	PRESS (MB) 1015.87	PR ALT(KM) -0.02	T 11.10C	TAS (M/S) 74.50	Z 5.19E-08
2	1.49E+08				
4	1.05E+09				
6	1.51E+07				
8	5.86E+06				
10	1.67E+06				
12	1.67E+06				
14	0.				
16	8.35E+05				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 2.69E-J5 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23105139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MJ) NUMBER/(M**3-MM)	PRESS (MB) 1009.70	PR ALT(KM) 0.03	T 10.94C	TAS (M/S) 73.96	Z 2.02E-08
2	1.35E+08				
4	9.85E+07				
6	2.27E+07				
8	4.19E+06				
10	3.36E+06				
12	8.41E+05				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 2.37E-J5 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23106119*

PARTICLE SIZE DISTRIBUTIONS SIZE(MJ) NUMBER/(M**3-MM)	PRESS (MB) 994.63	PR ALT(KM) 0.16	T 13.67C	TAS (M/S) 76.23	Z 2.08E-09
2	3.77E+07				
4	2.29E+07				
6	4.97E+06				
8	2.45E+06				
10	0.				
12	0.				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 5.07E-J6 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23105119*

PARTICLE SIZE DISTRIBUTIONS SIZE(MJ) NUMBER/(M**3-MM)	PRESS (MB) 1015.59	PR ALT(KM) -0.02	T 10.74C	TAS (M/S) 73.75	Z 3.43E-08
2	1.30E+08				
4	1.29E+08				
6	2.28E+07				
8	4.23E+06				
10	8.45E+05				
12	1.69E+06				
14	8.46E+05				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 2.77E-J5 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23105159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MJ) NUMBER/(M**3-MM)	PRESS (MB) 1011.3	PR ALT(KM) 0.17	T 12.50C	TAS (M/S) 74.19	Z 2.03E-09
2	6.47E+07				
4	4.47E+07				
6	3.36E+06				
8	1.69E+06				
10	0.				
12	0.				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 6.10E-06 MED D 4

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23106139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MJ) NUMBER/(M**3-MM)	PRESS (MB) 991.06	PR ALT(KM) 0.19	T 17.46C	TAS (M/S) 81.25	Z 2.81E-09
2	3.27E+07				
4	2.07E+07				
6	5.74E+06				
8	0.				
10	7.91E+05				
12	0.				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 4.64E-J6 MED D 5

PASS 5 --- 500 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23110159*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MH)	PRESS (MB)
2	1.24E+08	1012.32
4	1.03E+08	PR ALT(KM)
6	1.37E+07	.01
8	5.65E+06	T 10.90C
10	0.14E+05	TAS (M/S)
12	0.14E+05	77.18
14	0.	Z 1.40E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	
LWC	1.96E-05	MEO 0 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23111139*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MH)	PRESS (MB)
2	1.56E+08	1012.45
4	1.27E+08	PR ALT(KM)
6	2.70E+07	.01
8	4.17E+06	T 11.06C
10	0.	TAS (M/S)
12	0.	76.33
14	0.	Z 7.62E-09
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	
LWC	2.42E-05	MEO 0 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23112119*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MH)	PRESS (MB)
2	7.38E+07	1110.85
4	4.30E+07	PR ALT(KM)
6	8.97E+06	.03
8	3.23E+06	T 13.26C
10	0.	TAS (M/S)
12	8.17E+05	77.01
14	7.3E+05	Z 1.29E-07
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	
LWC	1.95E-05	MEO 0 12

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23111159*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MH)	PRESS (MB)
2	1.45E+08	1012.69
4	1.23E+08	PR ALT(KM)
6	1.76E+07	.00
8	4.13E+06	T 11.03C
10	1.62E+06	TAS (M/S)
12	0.07E+05	77.21
14	1.62E+06	Z 0.12E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	
LWC	3.05E-05	MEO 0 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23111159*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MH)	PRESS (MB)
2	1.17E+08	1111.77
4	7.03E+07	PR ALT(KM)
6	1.30E+07	.01
8	3.23E+06	T 12.14C
10	0.14E+05	TAS (M/S)
12	7.99E+05	77.44
14	0.	Z 1.96E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	
LWC	1.60E-05	MEO 0 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23112139*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MH)	PRESS (MB)
2	1.45E+08	1012.84
4	1.10E+08	PR ALT(KM)
6	2.79E+07	.01
8	4.16E+06	T 11.07C
10	8.30E+05	TAS (M/S)
12	0.	75.48
14	1.66E+06	Z 3.62E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	
LWC	2.56E-05	MEO 0 5

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PASS 5 ---- 500 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23112459*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1311.81	PR ALT(KM) .01	T 12.71C	TAS (M/S) 78.41	Z 7.30E-08
2	7.06E+07				
4	6.37E+07				
6	6.38E+06				
8	2.39E+06				
10	0.				
12	0.				
14	0.				
16	0.				
18	7.92E+05				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	1.07E-35	4.0 D 7			

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23113139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1011.22	PR ALT(KM) .02	T 11.57C	TAS (M/S) 77.49	Z 2.64E-04
2	1.65E+08				
4	1.06E+09				
6	2.51E+07				
8	3.82E+06				
10	7.97E+05				
12	0.09E+05				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	2.22E-35	4.0 D 5			

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23114139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1009.45	PR ALT(KM) .03	T 12.24C	TAS (M/S) 75.96	Z 1.31E-08
2	1.24E+08				
4	6.81E+07				
6	1.07E+07				
8	2.06E+06				
10	1.05E+06				
12	0.25E+05				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	1.50E-35	4.0 D 5			

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23117119*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1311.41	PR ALT(KM) .02	T 11.53C	TAS (M/S) 75.96	Z 1.16E-07
2	1.11E+08				
4	1.04E+08				
6	1.27E+07				
8	7.28E+06				
10	7.99E+05				
12	6.13E+05				
14	3.09E+05				
16	0.11E+05				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	3.24E-35	4.0 D 8			

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23117459*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1310.14	PR ALT(KM) .03	T 12.91C	TAS (M/S) 76.84	Z 1.13E-07
2	1.07E+08				
4	6.37E+07				
6	1.06E+07				
8	2.06E+06				
10	0.11E+05				
12	0.				
14	0.				
16	0.				
18	0.				
20	0.11E+05				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	1.89E-35	4.0 D 7			

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23114139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1011.52	PR ALT(KM) .01	T 12.13C	TAS (M/S) 77.93	Z 1.62E-08
2	1.15E+08				
4	7.39E+07				
6	1.28E+07				
8	1.53E+06				
10	0.05E+05				
12	1.60E+06				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	1.64E-05	4.0 D 5			

PASS 5 --- 500 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23114159*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MM)	PRESS (MB)
2	1.49E+08	1012.65
4	6.81E+07	PR ALT (KM)
6	1.27E+07	.01
8	0.	
10	8.31E+05	T 12.42C
12	1.59E+06	
14	0.	TAS (M/S)
16	0.	78.70
18	0.	
20	0.	Z 1.49E-04
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 1.43E-05 MLD 0 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23115139*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MM)	PRESS (MB)
2	9.33E+17	1012.37
4	6.35E+07	PR ALT (KM)
6	8.22E+06	.01
8	1.55E+06	
10	1.65E+06	T 13.91C
12	0.	
14	0.	TAS (M/S)
16	8.23E+05	75.56
18	0.	
20	0.	Z 1.63E-08
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 1.55E-05 MLD 0 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23116119*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MM)	PRESS (MB)
2	8.30E+07	1012.61
4	3.69E+07	PR ALT (KM)
6	9.00E+06	.01
8	7.98E+05	
10	0.	T 14.16C
12	0.	
14	0.	TAS (M/S)
16	0.	77.77
18	0.	
20	0.	Z 2.00E-09
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 6.81E-06 MLD 0 4

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23115119*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MM)	PRESS (MB)
2	7.72E+17	1012.49
4	4.09E+07	PR ALT (KM)
6	1.05E+07	.01
8	4.73E+06	
10	1.68E+06	T 13.72C
12	8.04E+05	
14	1.61E+05	TAS (M/S)
16	0.	77.57
18	0.	
20	0.	Z 3.37E-08
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 1.75E-05 MLD 0 8

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23115159*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MM)	PRESS (MB)
2	9.76E+17	1012.86
4	4.92E+07	PR ALT (KM)
6	1.23E+07	.01
8	5.77E+06	
10	1.54E+06	T 13.68C
12	0.	
14	8.26E+05	TAS (M/S)
16	0.	76.14
18	0.	
20	0.	Z 2.31E-08
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 1.62E-05 MLD 0 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23116139*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MM)	PRESS (MB)
2	6.41E+17	1111.95
4	3.75E+07	PR ALT (KM)
6	1.50E+07	.01
8	1.58E+06	
10	7.89E+05	T 13.91C
12	0.	
14	0.	TAS (M/S)
16	0.	78.86
18	0.	
20	0.	Z 1.04E-08
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 1.12E-05 MLD 0 6

2455 5 --- 500 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *2316159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1011.81	PR ALT(KM) .01	T 15.04C	TAS (M/S) 77.71	Z 3.22E-08
2	6.34E+07				
4	2.97E+07				
6	5.61E+06				
8	8.01E+05				
10	8.07E+05				
12	0.				
14	0.				
16	8.02E+05				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 9.76E-35 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *2317159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1011.17	PR ALT(KM) .02	T 15.42C	TAS (M/S) 77.27	Z 8.29E-09
2	6.07E+07				
4	4.95E+07				
6	1.15E+07				
8	1.59E+06				
10	0.				
12	8.14E+05				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 9.77E-36 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *2318159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1009.23	PR ALT(KM) .03	T 15.78C	TAS (M/S) 77.99	Z 7.30E-09
2	6.63E+07				
4	2.72E+07				
6	8.78E+06				
8	8.11E+05				
10	0.				
12	8.11E+05				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 7.42E-36 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *2317159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1011.09	PR ALT(KM) .02	T 15.06C	TAS (M/S) 77.17	Z 7.40E-08
2	5.37E+07				
4	3.23E+07				
6	4.84E+06				
8	1.62E+06				
10	8.02E+05				
12	0.				
14	8.10E+05				
16	0.				
18	8.16E+05				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 1.61E-35 MED D 13

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *2317159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1012.49	PR ALT(KM) .01	T 15.57C	TAS (M/S) 79.05	Z 6.36E-09
2	4.74E+07				
4	4.73E+07				
6	4.75E+06				
8	5.32E+06				
10	1.57E+06				
12	0.				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 1.08E-05 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *2318159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1000.78	PR ALT(KM) .10	T 15.50C	TAS (M/S) 76.16	Z 3.72E-09
2	3.68E+07				
4	3.17E+07				
6	7.36E+06				
8	8.49E+05				
10	8.19E+05				
12	0.				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 6.32E-36 MED D 5

PAGE 6 --- 100 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23024059*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MH)	PRESS (MB)
2	1.28E+08	1325.82
4	1.22E+08	PR ALT(KM)
6	2.96E+07	-1.10
8	9.62E+06	T 11.41C
10	4.61E+06	TAS (M/S)
12	1.59E+06	77.83
14	0.	Z 6.80E-08
16	8.04E+5	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.83E-35 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23025139*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MH)	PRESS (MB)
2	1.26E+08	1326.26
4	1.47E+08	PR ALT(KM)
6	3.96E+07	-1.11
8	9.91E+06	T 11.49C
10	1.95E+06	TAS (M/S)
12	0.25E+5	75.50
14	1.65E+06	Z 2.72E-07
16	8.25E+05	
18	0.	
20	0.	
22	8.26E+05	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 5.15E-35 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23026119*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MH)	PRESS (MB)
2	1.32E+08	1326.17
4	1.31E+08	PR ALT(KM)
6	2.36E+07	-1.11
8	6.31E+06	T 11.49C
10	3.25E+06	TAS (M/S)
12	0.	76.69
14	8.15E+05	Z 2.37E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 2.87E-35 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23025119*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MH)	PRESS (MB)
2	1.41E+08	1326.13
4	1.45E+08	PR ALT(KM)
6	3.31E+07	-1.11
8	8.91E+06	T 11.38C
10	3.24E+06	TAS (M/S)
12	0.	76.78
14	1.64E+06	Z 7.46E-08
16	8.08E+05	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.91E-05 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23025159*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MH)	PRESS (MB)
2	1.52E+08	1326.16
4	1.36E+08	PR ALT(KM)
6	3.22E+07	-1.11
8	5.77E+06	T 11.38C
10	5.78E+06	TAS (M/S)
12	1.54E+06	75.64
14	0.	Z 9.25E-08
16	0.27E+05	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.74E-05 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23026139*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M*3-MH)	PRESS (MB)
2	1.15E+08	1326.10
4	1.15E+08	PR ALT(KM)
6	2.51E+07	-1.11
8	4.33E+06	T 11.64C
10	2.44E+06	TAS (M/S)
12	0.	76.96
14	0.	Z 1.29E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 2.31E-35 MED D 5

PASS 6 --- 100 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23126459*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)
2	1.07E+08	1326.05
4	0.35E+07	PR ALT (KM)
6	1.61E+07	-11
8	5.63E+06	T 11.00C
10	3.62E+06	TAS (M/S)
12	8.13E+05	77.57
14	1.60E+06	2 9.11E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LMC 3.05E-35 MED D 8

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23127139*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)
2	1.06E+08	1026.59
4	1.03E+08	PR ALT (KM)
6	2.96E+07	-11
8	1.97E+07	T 11.54C
10	9.42E+05	TAS (M/S)
12	0.	75.75
14	2.47E+06	2 0.38E-08
16	0.27E+05	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LMC 3.59E-35 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23128119*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)
2	0.27E+07	1876.22
4	1.23E+08	PR ALT (KM)
6	2.67E+07	-11
8	6.47E+06	T 11.48C
10	7.32E+06	TAS (M/S)
12	3.27E+06	76.88
14	0.13E+05	2 6.89E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LMC 3.08E-35 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23127119*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)
2	1.18E+08	1026.30
4	1.07E+08	PR ALT (KM)
6	1.44E+07	-11
8	4.75E+06	T 11.53C
10	7.94E+05	TAS (M/S)
12	0.	77.97
14	1.62E+06	2 1.26E-07
16	7.96E+05	
18	7.90E+05	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LMC 3.12E-35 MED D 8

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23127159*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)
2	9.92E+07	1026.59
4	1.03E+08	PR ALT (KM)
6	2.37E+07	-11
8	7.43E+06	T 11.85C
10	2.48E+06	TAS (M/S)
12	0.27E+05	75.43
14	1.65E+06	2 7.63E-08
16	0.24E+05	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LMC 3.23E-35 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23129139*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)
2	9.38E+07	1326.14
4	1.08E+08	PR ALT (KM)
6	2.02E+07	-11
8	8.32E+06	T 11.53C
10	0.	TAS (M/S)
12	3.26E+06	76.72
14	0.79E+05	2 7.37E-08
16	0.14E+05	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LMC 3.30E-35 MED D 7

PAGE 6 --- 100 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2312019*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M**3-MM)	PRESS (MB) 1026.02	PR ALT (KM) -0.11	T 11.02C	TAS (M/S) 76.45	Z 0.23E-08
2	1.05E+08				
4	9.46E+07				
6	2.12E+07				
8	4.08E+06				
10	1.63E+06				
12	2.45E+06				
14	1.63E+06				
16	0.13E+05				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 3.21E-35 MED D 0

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2312919*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M**3-MM)	PRESS (MB) 1026.10	PR ALT (KM) -0.11	T 11.01C	TAS (M/S) 76.32	Z 9.37E-08
2	1.20E+08				
4	1.04E+08				
6	1.92E+07				
8	6.34E+06				
10	7.68E+05				
12	2.38E+06				
14	8.11E+05				
16	0.				
18	7.37E+05				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 3.18E-35 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2313019*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M**3-MM)	PRESS (MB) 1026.48	PR ALT (KM) -0.11	T 10.78C	TAS (M/S) 75.73	Z 2.53E-08
2	1.57E+08				
4	1.19E+08				
6	2.72E+07				
8	5.77E+06				
10	2.24E+06				
12	1.64E+06				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 2.84E-35 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2312919*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M**3-MM)	PRESS (MB) 1026.13	PR ALT (KM) -0.11	T 12.30C	TAS (M/S) 76.98	Z 4.14E-08
2	9.56E+07				
4	0.50E+07				
6	1.24E+07				
8	0.86E+06				
10	2.43E+06				
12	2.43E+06				
14	0.10E+05				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 2.54E-35 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2312919*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M**3-MM)	PRESS (MB) 1026.51	PR ALT (KM) -0.11	T 11.11C	TAS (M/S) 75.51	Z 9.61E-08
2	1.19E+08				
4	9.83E+07				
6	2.23E+07				
8	9.32E+06				
10	0.28E+05				
12	1.65E+06				
14	0.29E+05				
16	1.66E+06				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 3.52E-35 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *2313019*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU) NUMBER/(M**3-MM)	PRESS (MB) 1026.63	PR ALT (KM) -0.11	T 10.77C	TAS (M/S) 75.66	Z 6.14E-08
2	1.23E+08				
4	1.26E+08				
6	3.71E+07				
8	1.24E+07				
10	2.47E+06				
12	2.47E+06				
14	1.65E+06				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				

LWC 4.14E-35 MED D 7

PASS 6 --- 100 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23130159*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB)	1026.59	PR ALT (KM)	T	10.48C	TAS (M/S)	75.86	Z 1.41E-07	MED D 7	LMC 4.53E-15
2	1.15E+08										
4	1.36E+08										
6	3.07E+07										
8	9.45E+06										
10	3.33E+06										
12	8.31E+05										
14	1.57E+06										
16	8.27E+05										
18	8.29E+05										
20	0.										
22	0.										
24	0.										
26	0.										
28	0.										
30	0.										

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23131159*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB)	1026.14	PR ALT (KM)	T	11.72C	TAS (M/S)	77.83	Z 6.37E-09	MED D 5	LMC 1.74E-15
2	1.17E+08										
4	9.11E+07										
6	2.56E+07										
8	4.25E+06										
10	0.										
12	0.										
14	0.										
16	0.										
18	0.										
20	0.										
22	0.										
24	0.										
26	0.										
28	0.										
30	0.										

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23132159*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB)	1026.34	PR ALT (KM)	T	10.68C	TAS (M/S)	77.76	Z 7.34E-08	MED D 7	LMC 4.79E-15
2	1.11E+08										
4	1.33E+08										
6	3.53E+07										
8	1.52E+07										
10	6.40E+06										
12	4.11E+06										
14	7.98E+05										
16	0.										
18	0.										
20	0.										
22	0.										
24	0.										
26	0.										
28	0.										
30	0.										

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23131159*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB)	1026.28	PR ALT (KM)	T	11.84C	TAS (M/S)	75.92	Z 6.73E-08	MED D 7	LMC 3.41E-15
2	1.16E+08										
4	1.19E+08										
6	2.17E+07										
8	8.23E+06										
10	4.11E+06										
12	8.25E+05										
14	8.25E+05										
16	0.										
18	0.										
20	0.										
22	0.										
24	0.										
26	0.										
28	0.										
30	0.										

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23131159*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB)	1026.31	PR ALT (KM)	T	11.51C	TAS (M/S)	77.43	Z 1.59E-08	MED D 5	LMC 1.93E-15
2	1.14E+08										
4	8.56E+07										
6	1.77E+07										
8	7.23E+06										
10	8.03E+05										
12	8.26E+05										
14	0.										
16	0.										
18	0.										
20	0.										
22	0.										
24	0.										
26	0.										
28	0.										
30	0.										

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23132159*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB)	1026.47	PR ALT (KM)	T	10.56C	TAS (M/S)	76.20	Z 1.88E-07	MED D 7	LMC 4.22E-05
2	1.23E+08										
4	1.28E+08										
6	4.93E+07										
8	8.19E+06										
10	4.91E+06										
12	0.										
14	1.54E+06										
16	0.										
18	8.19E+05										
20	0.										
22	0.										
24	0.										
26	0.										
28	0.										
30	0.										

PASS 6 --- 100 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23132159*

PARTICLE SIZE (MU)	DISTRIBUTIONS NUMBER/(4*3-MH)	PRESS (MB)
2	1.07E+08	1326.22
4	1.11E+08	PR ALT(KM)
6	2.63E+07	-0.11
8	1.56E+07	T 10.43C
10	1.09E+06	TAS (M/S)
12	0.22E+05	76.05
14	1.64E+06	Z 5.08E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.65E-J5 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23133139*

PARTICLE SIZE (MU)	DISTRIBUTIONS NUMBER/(4*3-MH)	PRESS (MB)
2	1.22E+08	1322.42
4	1.22E+08	PR ALT(KM)
6	3.21E+07	-0.04
8	1.41E+07	T 9.61C
10	3.11E+06	TAS (M/S)
12	4.69E+06	79.65
14	0.	Z 1.55E-07
16	1.57E+06	
18	7.93E+05	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 5.27E-J5 MED D 8

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23134119*

PARTICLE SIZE (MU)	DISTRIBUTIONS NUMBER/(4*3-MH)	PRESS (MB)
2	8.78E+07	1006.47
4	7.86E+07	PR ALT(KM)
6	1.36E+07	0.04
8	3.01E+06	T 11.62C
10	0.	TAS (M/S)
12	0.	81.56
14	0.	Z 4.64E-09
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 1.30E-J5 MED D 4

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23133119*

PARTICLE SIZE (MU)	DISTRIBUTIONS NUMBER/(4*3-MH)	PRESS (MB)
2	1.27E+08	1326.12
4	9.82E+07	PR ALT(KM)
6	2.65E+07	-0.11
8	0.81E+06	T 10.14C
10	2.38E+06	TAS (M/S)
12	3.16E+06	77.44
14	7.92E+05	Z 7.10E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.65E-J5 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23133159*

PARTICLE SIZE (MU)	DISTRIBUTIONS NUMBER/(4*3-MH)	PRESS (MB)
2	1.37E+08	1315.10
4	1.21E+08	PR ALT(KM)
6	3.59E+07	-0.02
8	5.31E+06	T 9.43C
10	0.	TAS (M/S)
12	0.	81.73
14	0.	Z 3.57E-08
16	7.50E+05	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.62E-J5 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23134139*

PARTICLE SIZE (MU)	DISTRIBUTIONS NUMBER/(4*3-MH)	PRESS (MB)
2	3.28E+07	1061.02
4	2.34E+07	PR ALT(KM)
6	6.24E+06	0.10
8	1.56E+06	T 14.11C
10	7.83E+05	TAS (M/S)
12	0.	79.95
14	0.	Z 3.99E-09
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 5.81E-J6 MED D 5

PASS 7 --- 750 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23130159*

PARTICLE SIZE DISTRIBUTIONS	PRESS (MB)
SIZE (MU) NUMBER/(M**3-MM)	1002.58
2 5.78E+07	PR A.T (KM)
4 3.78E+07	.09
6 6.43E+06	T 13.18C
8 8.02E+05	TAS (M/S)
10 8.02E+05	77.57
12 0.	Z 7.15E-09
14 0.	
16 0.	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 7.59E-16 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23139139*

PARTICLE SIZE DISTRIBUTIONS	PRESS (MB)
SIZE (MU) NUMBER/(M**3-MM)	1002.52
2 4.29E+07	PR ALT (KM)
4 2.59E+07	.09
6 5.67E+06	T 13.72C
8 1.62E+06	TAS (M/S)
10 1.62E+06	77.06
12 8.08E+05	Z 4.00E-08
14 0.	
16 8.46E+05	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 1.21E-15 MED D 10

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23140139*

PARTICLE SIZE DISTRIBUTIONS	PRESS (MB)
SIZE (MU) NUMBER/(M**3-MM)	1003.26
2 1.00E+08	PR ALT (KM)
4 6.13E+07	.08
6 1.06E+07	T 11.67C
8 3.28E+06	TAS (M/S)
10 8.23E+05	76.42
12 8.22E+05	Z 1.16E-08
14 0.	
16 0.	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 1.35E-15 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23139119*

PARTICLE SIZE DISTRIBUTIONS	PRESS (MB)
SIZE (MU) NUMBER/(M**3-MM)	1011.82
2 5.62E+07	PR ALT (KM)
4 3.97E+07	.10
6 8.12E+06	T 13.74C
8 4.85E+06	TAS (M/S)
10 8.37E+05	77.01
12 0.	Z 6.49E-09
14 0.	
16 0.	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 9.85E-16 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23139159*

PARTICLE SIZE DISTRIBUTIONS	PRESS (MB)
SIZE (MU) NUMBER/(M**3-MM)	1102.76
2 6.90E+07	PR ALT (KM)
4 3.41E+07	.03
6 6.49E+06	T 13.13C
8 2.43E+06	TAS (M/S)
10 1.83E+06	76.91
12 8.18E+05	Z 4.13E-09
14 0.	
16 8.18E+05	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 1.33E-15 MED D 9

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23140139*

PARTICLE SIZE DISTRIBUTIONS	PRESS (MB)
SIZE (MU) NUMBER/(M**3-MM)	1002.43
2 5.29E+07	PR ALT (KM)
4 4.21E+07	.09
6 7.12E+06	T 13.02C
8 3.14E+06	TAS (M/S)
10 3.14E+06	79.51
12 0.	Z 1.07E-08
14 0.	
16 0.	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 1.13E-15 MED D 7

PASS 7 --- 750 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23140159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1001.60	PR ALT(KM) 10	TAS (M/S) 79.52	Z 3.33E-09
2	1.00E+07			
4	1.00E+07			
6	3.91E+06			
8	7.83E+05			
10	7.83E+05			
12	0.			
14	0.			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			
LWC	4.10E-16			4ED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23141139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1003.26	PR ALT(KM) 10	TAS (M/S) 76.13	Z 1.12E-07
2	8.34E+07			
4	7.16E+07			
6	1.18E+07			
8	1.94E+06			
10	8.66E+05			
12	0.			
14	0.			
16	0.			
18	0.			
20	7.98E+05			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			
LWC	1.96E-15			MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23142119*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1002.39	PR ALT(KM) 10	TAS (M/S) 77.84	Z 2.35E-09
2	9.00E+07			
4	5.95E+07			
6	8.05E+06			
8	2.41E+06			
10	8.12E+05			
12	8.38E+05			
14	7.64E+05			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			
LWC	1.47E-15			MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23141119*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1002.13	PR ALT(KM) 10	TAS (M/S) 78.43	Z 9.24E-09
2	3.34E+07			
4	2.54E+07			
6	2.37E+06			
8	2.39E+06			
10	7.94E+05			
12	7.89E+05			
14	0.			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			
LWC	6.98E-16			MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23141159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1002.59	PR ALT(KM) 10	TAS (M/S) 78.34	Z 5.38E-08
2	5.34E+07			
4	3.34E+07			
6	1.44E+07			
8	7.98E+05			
10	1.58E+06			
12	7.94E+05			
14	8.17E+05			
16	8.17E+05			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			
LWC	1.71E-05			MED D 10

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23142139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1002.15	PR ALT(KM) 10	TAS (M/S) 79.99	Z 3.39E-08
2	7.49E+07			
4	4.64E+07			
6	8.57E+06			
8	2.34E+06			
10	0.			
12	7.79E+05			
14	1.56E+06			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			
LWC	1.46E-15			MED D 7

PASS 7 --- 750 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23142459*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1007.00	PR ALT (KM) .09	TAS (M/S) 78.05	Z 3.37E-09
2	6.87E+07			
4	5.91E+07			
6	7.20E+06			
8	3.30E+06			
10	0.			
12	0.06E+05			
14	1.39E+06			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 1.61E-15 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23143159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1302.32	PR ALT (KM) .09	TAS (M/S) 78.34	Z 2.12E-08
2	7.72E+07			
4	2.96E+07			
6	1.51E+07			
8	3.18E+06			
10	0.			
12	2.19E+06			
14	0.			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 1.38E-15 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23144159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1802.25	PR ALT (KM) .00	TAS (M/S) 78.74	Z 3.21E-08
2	6.22E+07			
4	5.14E+07			
6	9.49E+06			
8	3.16E+06			
10	0.			
12	0.			
14	0.			
16	7.89E+05			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 1.23E-15 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E73-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23147119*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1013.34	PR ALT (KM) .08	TAS (M/S) 78.57	Z 4.54E-09
2	6.19E+07			
4	4.04E+07			
6	1.27E+07			
8	7.37E+05			
10	7.88E+05			
12	0.			
14	0.			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 9.51E-06 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23143159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1002.45	PR ALT (KM) .09	TAS (M/S) 78.88	Z 5.89E-09
2	6.55E+07			
4	3.56E+07			
6	1.26E+07			
8	3.17E+06			
10	7.89E+05			
12	0.			
14	0.			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 9.87E-16 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E73-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23144159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB) 1002.97	PR ALT (KM) .09	TAS (M/S) 78.75	Z 3.29E-09
2	5.76E+07			
4	2.93E+07			
6	7.13E+06			
8	3.16E+06			
10	0.			
12	0.			
14	0.			
16	0.			
18	0.			
20	0.			
22	0.			
24	0.			
26	0.			
28	0.			
30	0.			

LWC 6.91E-16 MED D 5

PASS 7 --- 750 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23145119*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)	PR ALT(KM)	TAS (M/S)	Z (M)
2	4.72E+07	1003.31	15.392	79.21	0.51E-08
4	3.94E+07				
6	7.87E+06				
8	3.15E+06				
10	0.				
12	7.87E+05				
14	0.				
16	0.				
18	7.88E+05				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	1.4E-15	4ED D 8			

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23145139*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)	PR ALT(KM)	TAS (M/S)	Z (M)
2	4.72E+07	1003.04	15.392	78.76	1.42E-09
4	3.94E+07				
6	7.87E+06				
8	3.15E+06				
10	0.				
12	7.87E+05				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	4.3E-16	4ED D 6			

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23146119*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)	PR ALT(KM)	TAS (M/S)	Z (M)
2	4.24E+07	1003.28	15.392	76.95	3.35E-08
4	2.37E+07				
6	3.94E+06				
8	2.86E+06				
10	0.				
12	1.58E+06				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	1.15E-16	4ED D 10			

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23145119*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)	PR ALT(KM)	TAS (M/S)	Z (M)
2	4.72E+07	1003.07	15.392	79.37	3.74E-09
4	3.94E+07				
6	7.87E+06				
8	3.15E+06				
10	0.				
12	7.87E+05				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	5.92E-16	4ED D 5			

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23145139*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)	PR ALT(KM)	TAS (M/S)	Z (M)
2	4.72E+07	1002.79	15.392	78.02	0.
4	3.94E+07				
6	7.87E+06				
8	3.15E+06				
10	0.				
12	7.87E+05				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	3.73E-16	4ED D 4			

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 879-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23146139*

PARTICLE SIZE DISTRIBUTIONS	NUMBER/(M**3-MM)	PRESS (MB)	PR ALT(KM)	TAS (M/S)	Z (M)
2	4.72E+07	1003.25	15.392	78.66	1.47E-04
4	3.94E+07				
6	7.87E+06				
8	3.15E+06				
10	0.				
12	7.87E+05				
14	0.				
16	0.				
18	0.				
20	0.				
22	0.				
24	0.				
26	0.				
28	0.				
30	0.				
LWC	6.20E-16	4ED D 7			

PASS 7 --- 750 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23146159*

PARTICLE SIZE DISTRIBUTIONS
SIZE(MU) NUMBER/(4**3-MM)

2 2.53E+07 PRESS (MB) 1003.77
4 2.37E+07 PR A.T(KM) 1003.77
6 4.74E+06 .08
8 7.79E+05
10 0.0 T 16.23C
12 J. TAS (M/S)
14 0.0 TAS 78.94
16 0.0
18 0.0
20 0.0 Z 1.00E-09
22 0.0
24 0.0
26 J.
28 0.0
30 LWC 3.99E-16 MED 0 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23147139*

PARTICLE SIZE DISTRIBUTIONS
SIZE(MU) NUMBER/(4**3-MM)

2 2.68E+07 PRESS (MB) 1300.34
4 2.77E+07 PR A.T(KM) 1300.34
6 3.84E+06 .11
8 1.54E+06
10 0.0 T 15.94C
12 0.0
14 0.0 TAS (M/S)
16 5.0 TAS 81.32
18 0.0
20 0.0 Z 1.74E-09
22 J.
24 J.
26 0.0
28 0.0
30 LWC 3.39E-16 MED 0 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23148119*

PARTICLE SIZE DISTRIBUTIONS
SIZE(MU) NUMBER/(4**3-MM)

2 2.83E+07 PRESS (MB) 991.82
4 2.28E+07 PR A.T(KM) 991.82
6 7.11E+06 .18
8 2.31E+06
10 0.0 T 15.37C
12 7.07E+05
14 0.0 TAS (M/S)
16 7.90E+05 TAS 79.62
18 0.0
20 0.0 Z 3.56E-08
22 0.0
24 0.0
26 J.
28 0.0
30 LWC 1.54E-15 MED 0 8

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23147119*

PARTICLE SIZE DISTRIBUTIONS
SIZE(MU) NUMBER/(4**3-MM)

2 2.59E+07 PRESS (MB) 1061.80
4 1.54E+07 PR A.T(KM) 1061.80
6 2.74E+06 .10
8 2.34E+06
10 0.0 T 16.17C
12 0.0
14 0.0 TAS (M/S)
16 J. TAS 73.92
18 0.0
20 0.0 Z 2.04E-09
22 J.
24 0.0
26 0.0
28 0.0
30 LWC 3.73E-16 MED 0 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23147159*

PARTICLE SIZE DISTRIBUTIONS
SIZE(MU) NUMBER/(4**3-MM)

2 3.72E+07 PRESS (MB) 993.65
4 2.61E+07 PR A.T(KM) 993.65
6 3.33E+06 .15
8 2.44E+06
10 7.77E+05 T 15.60C
12 J.
14 0.0 TAS (M/S)
16 0.0 TAS 77.97
18 0.0
20 0.0 Z 4.37E-09
22 0.0
24 0.0
26 J.
28 0.0
30 LWC 5.47E-16 MED 0 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23148139*

PARTICLE SIZE DISTRIBUTIONS
SIZE(MU) NUMBER/(4**3-MM)

2 1.31E+07 PRESS (MB) 998.42
4 2.55E+07 PR A.T(KM) 998.42
6 5.35E+06 .19
8 3.66E+06
10 3.36E+06 T 15.31C
12 0.0
14 7.66E+05
16 J. TAS (M/S)
18 0.0 TAS 81.40
20 0.0 Z 2.25E-08
22 J.
24 0.0
26 0.0
28 0.0
30 LWC 1.13E-15 MED 0 9

PASS 6 --- 1000 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23150159*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	3.32E+07	990.97
4	2.51E+07	PR ALT (KM)
6	5.92E+06	.19
8	8.12E+05	T 15.35C
10	0.	TAS (M/S)
12	2.42E+06	76.94
14	8.14E+05	Z 6.02E-08
16	8.16E+05	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 1.51E-J5 MED D 12

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23151139*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	3.49E+07	992.13
4	2.32E+07	PR ALT (KM)
6	7.13E+06	.18
8	2.35E+06	T 15.38C
10	0.	TAS (M/S)
12	0.	78.71
14	0.	Z 2.74E-09
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 5.09E-J6 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23152119*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	1.51E+07	992.81
4	2.40E+07	PR ALT (KM)
6	3.92E+06	.17
8	7.92E+05	T 15.23C
10	7.94E+05	TAS (M/S)
12	0.	79.35
14	0.	Z 3.12E-09
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 4.61E-J6 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23151119*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	2.33E+07	991.63
4	2.81E+07	PR ALT (KM)
6	9.64E+06	.18
8	2.41E+06	T 15.39C
10	0.	TAS (M/S)
12	0.	77.67
14	0.	Z 3.10E-09
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 6.57E-J6 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23151159*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	2.10E+07	992.55
4	1.46E+07	PR ALT (KM)
6	4.28E+06	.17
8	3.90E+06	T 15.37C
10	1.56E+06	TAS (M/S)
12	0.	80.01
14	0.	Z 6.86E-09
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 6.70E-J6 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23152139*

PARTICLE SIZE DISTRIBUTIONS SIZE (MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	2.04E+07	992.57
4	2.54E+07	PR ALT (KM)
6	4.81E+06	.17
8	2.40E+06	T 15.26C
10	7.99E+05	TAS (M/S)
12	7.97E+05	78.04
14	0.	Z 5.63E-09
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 7.02E-J6 MED D 7

PASS 8 --- 1000 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23152159*

PARTICLE SIZE (MM)	DISTRIBUTIONS NUMBER/(M**3-MM)	PRESS (MB)
2	3.25E+07	994.85
4	2.78E+07	PR A.T (KM)
6	8.72E+06	.15
8	1.59E+06	T 14.92C
10	0.	TAS (M/S)
12	0.	78.60
14	0.	Z 2.46E-09
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 5.95E-16 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23153139*

PARTICLE SIZE (MM)	DISTRIBUTIONS NUMBER/(M**3-MM)	PRESS (MB)
2	2.75E+07	995.26
4	2.69E+07	PR A.T (KM)
6	5.34E+06	.15
8	1.50E+06	T 14.77C
10	0.	TAS (M/S)
12	7.88E+05	78.96
14	0.	Z 7.30E-09
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 5.68E-16 MED D 6

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23154119*

PARTICLE SIZE (MM)	DISTRIBUTIONS NUMBER/(M**3-MM)	PRESS (MB)
2	2.18E+07	992.67
4	2.17E+07	PR A.T (KM)
6	4.11E+06	.17
8	3.23E+06	T 14.53C
10	8.11E+05	TAS (M/S)
12	0.00E+05	77.59
14	0.	Z 1.79E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 8.60E-16 MED D 8

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23153119*

PARTICLE SIZE (MM)	DISTRIBUTIONS NUMBER/(M**3-MM)	PRESS (MB)
2	5.73E+07	994.82
4	3.45E+07	PR A.T (KM)
6	1.12E+07	.15
8	1.57E+06	T 14.45C
10	0.	TAS (M/S)
12	7.81E+05	79.45
14	0.	Z 7.33E-09
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 8.70E-16 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23153159*

PARTICLE SIZE (MM)	DISTRIBUTIONS NUMBER/(M**3-MM)	PRESS (MB)
2	2.89E+07	993.94
4	1.50E+07	PR A.T (KM)
6	2.41E+06	.15
8	8.05E+05	T 15.01C
10	0.03E+05	TAS (M/S)
12	0.	77.76
14	0.	Z 4.88E-09
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 3.72E-16 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT E79-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23154139*

PARTICLE SIZE (MM)	DISTRIBUTIONS NUMBER/(M**3-MM)	PRESS (MB)
2	3.55E+07	993.60
4	2.37E+07	PR A.T (KM)
6	6.29E+06	.16
8	4.72E+06	T 14.86C
10	0.	TAS (M/S)
12	7.95E+05	78.99
14	0.	Z 3.71E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LWC 9.23E-16 MED D 7

PASS 8 --- 1000 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 679-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23154159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB)
2 2.83E+07	993.92
4 2.44E+07	PR ALT(KM)
6 7.85E+06	.17
8 1.57E+06	T 14.65C
10 0.	TAS (M/S)
12 7.95E+05	79.35
14 7.86E+05	Z 2.34E-09
16 0.	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 9.41E-16 MED D 7

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 679-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23155139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB)
2 7.51E+07	992.40
4 4.11E+07	PR ALT(KM)
6 1.36E+07	.17
8 2.39E+06	T 13.36C
10 0.	TAS (M/S)
12 0.	78.80
14 0.	Z 3.63E-09
16 0.	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 9.11E-16 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 679-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23156119*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB)
2 7.63E+07	993.33
4 5.22E+07	PR ALT(KM)
6 1.25E+07	.17
8 1.56E+06	T 12.69C
10 0.	TAS (M/S)
12 0.	80.06
14 0.	Z 3.23E-09
16 0.	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 9.52E-16 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 679-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23155119*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB)
2 5.14E+07	994.69
4 3.55E+07	PR ALT(KM)
6 6.24E+06	.16
8 0.	T 13.05C
10 7.81E+05	TAS (M/S)
12 0.	80.07
14 0.	Z 3.04E-09
16 0.	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 6.10E-16 MED D 4

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 679-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23155159*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB)
2 5.44E+07	993.24
4 3.84E+07	PR ALT(KM)
6 8.58E+06	.17
8 1.59E+06	T 13.98C
10 7.93E+05	TAS (M/S)
12 0.	78.93
14 0.	Z 4.35E-09
16 0.	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 7.58E-16 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 679-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE: RAIN
INTERVAL START: *23156139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU) NUMBER/(M**3-MM)	PRESS (MB)
2 7.74E+07	994.06
4 3.24E+07	PR ALT(KM)
6 7.88E+06	.16
8 1.57E+06	T 12.87C
10 7.99E+05	TAS (M/S)
12 7.88E+05	79.00
14 0.	Z 3.79E-08
16 7.93E+05	
18 0.	
20 0.	
22 0.	
24 0.	
26 0.	
28 0.	
30 0.	

LWC 1.28E-15 MED D 8

PASS 8 --- 1000 ft.

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23156459*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	3.68E+07	994.73
4	2.56E+07	PR ALT(KM)
6	6.46E+06	.16
8	1.80E+06	T 14.32C
10	0.	TAS (M/S)
12	0.	78.03
14	0.	Z 2.15E-09
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LMC 1.5JE-J6 4.0 D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23157139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	3.49E+07	993.59
4	3.49E+07	PR ALT(KM)
6	1.63E+07	.16
8	2.38E+06	T 13.26C
10	7.95E+05	TAS (M/S)
12	0.	78.55
14	0.	Z 5.09E-09
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LMC 8.45E-J6 MED D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23158119*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	4.29E+07	994.40
4	2.7E+07	PR ALT(KM)
6	5.56E+06	.16
8	0.	T 13.79C
10	1.59E+05	TAS (M/S)
12	0.	78.51
14	0.	Z 1.55E-09
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LMC 5.71E-J6 4.0 D 5

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23157119*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	3.51E+07	993.46
4	2.39E+07	PR ALT(KM)
6	1.04E+07	.16
8	1.59E+06	T 13.28C
10	7.97E+05	TAS (M/S)
12	1.50E+06	78.18
14	0.	Z 7.21E-08
16	0.	
18	7.98E+05	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LMC 1.5JE-J5 MED D 11

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23157139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	3.7E+07	994.51
4	3.1E+07	PR ALT(KM)
6	7.9E+05	.16
8	2.37E+06	T 13.64C
10	1.58E+06	TAS (M/S)
12	7.88E+05	79.00
14	0.	Z 1.09E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LMC 8.45E-J6 MED D 8

MARINE BOUNDARY LAYER STUDY
SCATTER PROBE DATA

FLT 779-27 ON 22 MAR 79
20 SECOND AVERAGING TYPE1 RAIN
INTERVAL START: *23158139*

PARTICLE SIZE DISTRIBUTIONS SIZE(MU)	NUMBER/(M**3-MM)	PRESS (MB)
2	2.55E+07	994.24
4	2.39E+07	PR ALT(KM)
6	2.79E+06	.16
8	7.39E+05	T 14.07C
10	1.50E+06	TAS (M/S)
12	1.59E+06	78.30
14	7.97E+05	Z 2.95E-08
16	0.	
18	0.	
20	0.	
22	0.	
24	0.	
26	0.	
28	0.	
30	0.	

LMC 1.5JE-J5 MED D 11

